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# DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1984

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## HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

UNITED STATES SENATE

NINETY-EIGHTH CONGRESS

FIRST SESSION

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**Part 4—(Pages 1-502)**

**Arms Control and Disarmament Agency**
**Department of Defense**
**Nondepartmental Witnesses**

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# DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1984

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TUESDAY, APRIL 19, 1983

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, D.C.*

The subcommittee met, at 10 a.m., in room 192, Dirksen Senate Office Building, Hon. Warren Rudman, presiding.

Present: Senators Rudman, Stevens, and McClure.

## NONDEPARTMENTAL WITNESSES

### OPENING STATEMENT OF SENATOR RUDMAN

Senator RUDMAN. Today the subcommittee will receive testimony on the fiscal year 1984 defense appropriations bill from witnesses outside the Department of Defense.

On behalf of the subcommittee membership and the chairman, Senator Stevens, I want to welcome all witnesses this morning. In order to accommodate all witnesses that will testify, we ask you summarize your statement in 10 minutes or less and file your written testimony for the record. Your testimony will be published as part of the subcommittee hearing record this year.

Our first witness this morning is C. A. "Mack" McKinney, executive director for government affairs of Noncommissioned Officers Association of the United States.

Welcome, Mr. McKinney. If you would like to proceed.

## NONCOMMISSIONED OFFICERS ASSOCIATION OF THE UNITED STATES

### STATEMENT OF C. A. "MACK" McKINNEY, EXECUTIVE DIRECTOR FOR GOVERNMENT AFFAIRS, NONCOMMISSIONED OFFICERS ASSOCIATION OF THE UNITED STATES

### BUDGET REQUEST OF ASSOCIATION

Mr. MCKINNEY. Mr. Chairman, I appreciate this opportunity to appear here today on behalf of my association. If I may, as the chairman has indicated, may my full statement be placed in the record.

Senator RUDMAN. Without objection, it will be placed in the record.

Mr. MCKINNEY. Allow me to begin by saying that the NCOA is very aware that you face many crucial decisions in considering the administration's budget request for fiscal year 1984. It is a large budget that, if adopted, will create a large deficit.

Hopefully, the association's prepared statement will give some insight into the thoughts of senior noncommissioned and petty officers who man the Nation's defense around the world. Their list of recommendations appear to be extensive as in our statement; however, we are dealing with a new society in the military and many pieces and bits we once looked upon as luxuries are nothing more than basic necessities to our younger troops. Of course, I might add, these service members expect no more or no less than their civilian counterparts.

In the association's prepared statement, I have touched on a great number of issues. They run the gauntlet from allowances to retired pay and include manpower, military pay, miscellaneous items, and special pay. Hopefully, the subcommittee will review the association's statement and do what it can to adopt the recommendations made therein.

We of course do not expect all of the issues to be addressed this year. We thought we would let you know how the people think out there and what they are thinking about. Hopefully, they will be considered in the coming years.

Relative to the recommendations, please permit me to make a few brief remarks on the major ones.

### DEFENSE MANPOWER

At least keep active duty military end-strengths at their fiscal year 1983 levels. However, if any component of manpower is to be increased, it should be the active forces. NCOA believes it has justified giving priority to the Active Forces over civilian hires and the Reserves.

Concerning the Reserves, NCOA Congress to reveiw the size of the officer corps with that of enlisted personnel. NCOA believes there may be a need in later years to increase the latter's strength in order to provide sufficient support for officers who are recalled in the event of mobilization.

### MILITARY PAY

NCOA recommends adjusting the pay of the military's career professionals who have suffered compression in pay since the advent of the all volunteer force. In this respect, Senator William Cohen's pay bill, S. 335, might be used as a model to adjust the pay of NCOS/POS. NCOA offers no suggestion concerning career officers' pay and leaves such recommendations to those who are qualified to address that particular subject.

### SPECIAL PAYS

NCOA comments on enlistment and reenlistment bonuses, incentive/hazardous duty pay, foreign duty pay, sea pay, and lump-sum health payments, as well as severance pay, special pays for independent duties and certain members in pay grade E–9 and hostile fire pay. NCOA recommends Congress adopt a severance pay program for regular enlisted members.

Currently we provide severance pays for officers, nothing for enlisted personnel. This is extremely unfair to the latter group because they are not as prepared to return to civilian life as are officers who are better educated.

A special pay should be authorized for personnel who are not assigned within commuting distance of a military installation. At least, Congress could give them 100 percent CHAMPUS entitlement for their dependents.

Also recommended are: One, special pays for senior NCOS/POS in pay grade E-9 whose assignments above a battalion-level demand greater responsibility and authority; and, two, payments of hostile fire pay to service members on the same basis as that authorized by the State Department for its personnel.

### ALLOWANCES

NCOA urges Congress, among others, to provide sufficient funds that will fully reimburse service members for PCS moves ordered by the Federal Government. This is a priority. Also, NCOA encourages Congress to increase household weight allowances, particularly for senior NCOS/POS, and fund travel and transportation reimbursements for enlisted personnel as provided in Public Law 96-513.

### MISCELLANEOUS

It is important that Congress continues to recognize the value of subsidizing the military benefits promised to service members. Additionally, NCOA urges Congress to fund a dental—CHAMPUS—program for dependents of active duty personnel, as many civilian employers are doing for their workers these days, and support adequate impact aid funds.

We know this committee, of course, has no jurisdiction over appropriation of impact funds, but we would certainly like to have your individual support in that particular area.

Last, but not least, is military retired pay. NCOA believes that the provisions authorizing a one-half COLA for retirees under 62 and reductions in salaries of Federal employees who are earning military retired pay is unfair, inequitable, and discriminating, The association recommends their repeal and that no further adverse actions be taken relative to military retired pay until Congress has had an opportunity to review the recommendations of the Fifth Quadrennial Report on Military Compensation due later this year.

That concludes my brief remarks, Mr. Chairman. I appreciate again the opportunity to appear here.

Senator RUDMAN. We appreciate your being here. We certainly will look very closely at the recommendations you have presented to us this morning.

Mr. MCKINNEY. Thank you very much.

Senator RUDMAN. Thank you very much.

[The prepared statement of Mr. McKinney follows:]

# NON COMMISSIONED OFFICERS ASSOCIATION OF THE UNITED STATES OF AMERICA

## STATEMENT of

Sergeant Major C. A. "Mack" McKinney USMC Ret.
Executive Director for Government Affairs

Sergeant Major C. A. "Mack" McKinney USMC Ret. first enlisted in the Marine Corps in 1942. He retired in 1971 after serving in WWII, in Korea, and Vietnam where he earned 4 battle stars and the Combat Action Ribbon. Upon retirement he became associated with the Non Commissioned Officers Association of the USA (NCOA) and became its first Washington representative. He presently serves as the Association's Executive Director for Government Affairs. He also served as an elected officer and director of the Association for nearly 12 years vefore retiring in 1982 as its Chairman Emeritus.

Sergeant Major McKinney is a past State Commandant of the Dept. of Texas, Marine Corps League, a past president of the Combined National veterans Association of America (CNVA), and a past director and officer of the Exchange Club of Capitol Hill. He recently was nominated by the new Veterans Administration Administrator to be a consultant to that agency's Advisory Committee on Cemeteries and Memorials.

## NON COMMISSIONED OFFICERS ASSOCIATION of the USA (NCOA)

NCOA is a military-veterans fraternal organization chartered in Texas with more than 200 chapters world-wide. It has a membership in excess of 250,000 with 150,000-plus Noncommissioned and Petty Officers who have served or are now serving in the U.S. armed forces. The other 100,000 members are veterans of all ranks who have served honorably in the Army, Navy, Marine Corps, Air Force and Coast Guard.

The Association is committed to a strong defense for the Nation and in improving the well-being of the men and women who have served, are serving, or will serve in the Armed Forces of the United States.

## FY 1984 PROPOSED DEFENSE MANPOWER BUDGET

The Administration's FY 1984 Defense Budget contains a request of $42.7 billion for military personnel, $5.2 billion for reserve and guard personnel, $29.3 billion for civilian personnel and $16.8 for military retired pay. The new budget is compared below to the Administration's FY 1983 budget request.[1]

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[1] Source: Manpower Requirements Report for FY 1983 and for FY 1984, DoD.

(in millions of dollars)

| CATEGORY | FY 1984 | FY 1983 | DIFFERENCE |
|---|---|---|---|
| Military Personnel | $42,729 | $43,064 | (-) $335 |
| Reserve & Guard | 5,198 | 4,864 | (+) 334 |
| Civilians | 29,347 | 29,182 | (+) 165 |
| Retired Pay | 16,806 | 16,511 | (+) 295 |

None of the FY 1984 funds in the first three categories above have been earmarked for a pay raise. Instead, there would be an increase in manpower strengths of 83,000.

Individual manpower costs by Category and Component vary in the FY 1984 budget. These costs and variances are shown by Category in the below table with costs by Component following in the second table.

MANPOWER COSTS BY CATEGORY [2]

| CATEGORY | PLANNED STRENGTHS | FUNDING (in billions) | AVERAGE PER INDIVIDUAL |
|---|---|---|---|
| Active Duty | 2,165,000 | $42.7 | $19,736 [3] |
| Guard/Reserve | 1,027,000 | 5.2 | 5,063 |
| Civilian | 1,076,000 | 29.3 | 27,274 [4] |
| Retired | 1,454,000 | 16.8 | 11,554 [5] |

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[2] Source: DoD Manpower Requirements Report FY 1984.

[3] Includes government's share of social security contributions, PCS travel and other components (see following table) that are not a part of military members pay, allowances, bonuses & special pays.

[4] Includes government's share of health and life insurance and retired pay contributions.

[5] Includes payments (approx. $411M) to nearly 80,000 survivors/beneficiaries of RSFPP or SBP (as of Sep. 30, 1982); most of which, if not all, is paid by participating retired military personnel.

## FY 1984 MANPOWER COSTS BY COMPONENT
(from FY 1984 President's Budget in TOA-$M)

| COST CATEGORIES | Army | Navy | Marine Corps | Air Force | Defense Agencies | DoD Wide | Total DoD |
|---|---|---|---|---|---|---|---|
| **Military Personnel Appropriations** | | | | | | | |
| Basic Pay | 10,012 | 6,970 | 2,240 | 8,356 | | | 27,578 |
| Basic Allowances - Quarters(BAQ) | 1,171 | 937 | 251 | 1,081 | | | 3,440 |
| Variable Housing Allowance (VHA) | 214 | 306 | 81 | 260 | | | 862 |
| Subsistence (In-Kind and Cash Allowance) | 1,165 | 834 | 275 | 922 | | | 3,195 |
| Bonuses | 262 | 292 | 90 | 137 | | | 781 |
| Other Pay | 208 | 517 | 42 | 254 | | | 1,021 |
| Other Allowances | 404 | 318 | 112 | 338 | | | 1,173 |
| FICA | 665 | 464 | 150 | 554 | | | 1,833 |
| PCS Travel | 1,136 | 655 | 209 | 913 | | | 2,913 |
| Cadets | 32 | 35 | - | 32 | | | 99 |
| Miscellaneous | 77 | 60 | 28 | 48 | | | 213 |
| Subtotal | 15,345 | 11,388 | 3,479 | 12,096 | | | 43,108 |
| - Reimbursables (Pay and Allowances) | -130 | -94 | -16 | -138 | | | - 79 |
| Direct Obligations | 15,215 | 11,294 | 3,463 | 12,758 | | | 42,729 |
| TOTAL MILITARY PERSONNEL APPROPRIATIONS | 15,215 | 11,294 | 3,463 | 12,758 | | | 42,729 |
| **Reserve and Guard Personnel Appropriations** | | | | | | | |
| Pay | 2,448 | 540 | 177 | 752 | | | 3,857 |
| Allowances | 445 | 88 | 24 | 114 | | | 670 |
| Clothing | 134 | 23 | 9 | 21 | | | 187 |
| Travel | 247 | 83 | 25 | 78 | | | 432 |
| Other | 27 | 9 | 3 | 12 | | | 51 |
| Direct Obligations | 3,301 | 743 | 177 | 976 | | | 5,198 |
| TOTAL RES/GRD PERSONNEL APPROPRIATIONS | 3,301 | 743 | 177 | 976 | | | 5,198 |
| **Civilian Costs 6 7/** | | | | | | | |
| Salaries | 9,050 | 8,616 | | 6,309 | 2,713 | | 26,689 |
| Health and Life Insurance | 268 | 255 | | 187 | 80 | | 790 |
| Retired Pay (DoD Contribution) | 634 | 603 | | 442 | 190 | | 1,868 |
| Direct Obligations | 9,952 | 9,474 | | 6,938 | 2,983 | | 29,347 |
| TOTAL CIVILIAN COSTS 6/ 7/ | 9,952 | 9,474 | | 6,938 | 2,983 | | 29,347 |

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6/ Navy civilian costs and support costs are Department of Navy totals including Marine Corps. The data for development of the personnel support costs was not available as this report goes to press and will be furnished later.

7/ Defense-wide totals include the costs of civilians employed under the Defense Family Housing, Military Court of Appeals, Civil Defense, and Military Assistance Accounts.

SOURCE: Manpower Requirements Report FY 1984, DoD, Feb, 1983

## MANPOWER

Since the advent of the All-Volunteer Force end-strengths for active duty military personnel have decreased from 2,323,000 in June 1972 to 2,165,000 (planned for FY 1984). This is a 6.8 percent decrease over a 12 year period. Civilian strengths (direct hire) appear to have plunged nearly 9 percent during the same period (see "Civilian Employees" later in this statement). On the other hand, Reserve and Guard strengths will have climbed 11 percent rising from 924,000 to 1,027,000. [8/]

The FY 1984 planned end-strengths call for increases of 38,000 in the active forces, 17,000 in civilian direct hires and 28,000 (or 31,000 [8/]) in the Reserve and Guard. NCOA agrees there is a need for the increases, especially in the active forces, and encourages Congress to authorize and appropriate adequate funds to support the planned end-strengths in the following order of precedence; 1)- Active Forces, 2)- Civilian employees, and 3)- Reserve and Guard forces.

### Active Forces

The steady growth in the active duty strengths of the armed forces has greatly enhanced the combat readiness of both military personnel and units. The U.S. Army, in particular, has been successful in reducing personnel turbulence and creating a small unit environment through its Cohesion Operational Readiness and Training (COHORT) program. By keeping soldiers and their leaders together they can efficiently utilize training time, improve individual and unit morale, develop greater initiatives and sharpen the cutting edge of its combat arms units.

The other services also have witnessed a new period of cohesiveness among their personnel. Their forces have stabilized and with higher quality people filling the ranks, greater skill levels are being attained. Leadership has returned to the ranks without loss of management and the ability to utilize personnel in a cost-effective environment.

The current success can be primarily attributed to the present economy, regardless of the Administration's boast that other factors are contributing equally to the recruitment of higher quality personnel. With unemployment soaring above the 20 percent level for 16-to-20 year-old youths, more and more are looking to the military service as a means of employment and the chance to learn a skill. Any recruiter who has experienced the ups and downs of the economy while in that assignment will tell you that reruiting and retention is good when unemployment is high in the civilian market. He or she also can tell you how tough it is when jobs are available in the private sector.

It is contrary to building a positive defense posture if Congress decides to cut back on the active duty forces. The Nation's available

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[8/] This figure revised to 1,030,000 in ASD (M,RA&L) statement before House Subcommittee on Military Personnel and Compensation, Feb. 24, 1983.

manpower pool of young adult males will shortly be reduced. Now is the time to build the active duty forces. Otherwise, the Services will not be able to sustain quality input to improve their skill and experience factors and maintain current combat readiness levels.

There have been recommendations of reducing planned active duty strengths in favor of increasing Reserve and Guard accessions. NCOA objects to such proposals, either affecting FY 1983 programmed or FY 1984 planned end-strengths, for the following major reasons

a)- Affects combat readiness and efficiency, thereby, reducing the capability of the active forces to respond to variable world-wide missions assigned the armed services;

b)- Causes turmoil in the active ranks; affects the morale and cohesiveness of the active forces; lengthens overseas, deployment and sea-duty tours while shortening CONUS tours; reduces opportunity for normal advancements in grade; forces early-outs for sorely-needed middle and senior grade officers and enlisted personnel; and discourages personnel from re-enlisting because of insecure feelings of job-retention.

c)- sends a wrong signal to the Soviets as well as to our Allies that U.S. does not have the will to maintain a strong defense posture in the face of intense "lobbying" to reduce defense funding.

If reductions are contemplated, NCOA believes it is more important to sustain the current readiness of the active forces rather than increasing the size of the civilian or Reserve strengths. Active servicemebers, for the most, are fully trained, prepared and ready to deploy in the event of a crisis or an emergency. Further, it is more cost-effective for the federal government (perhaps not DoD) to "decivilianize" the military and, again, recruit and train military personnel to fill logistical and support billets that are required by the Services.

## Civilian Employees

Earlier in this statement, the Association noted that Civilian Direct-Hires appear to have plunged nearly 9 percent from June 30, 1972, to FY 1984 planned strengths (1,083,000 to 986,000). However, in reviewing "Civilain Manpower Statistics, Jan. 1983, DIOR, The Pentagon," federal employment in DoD totals 993,529 Direct Hires and, 83,832 Indirect Hires. Thus, the Jan. 31, 1983, direct hire strength is greater than that planned for FY 1984.

It is extremely difficult for the layman to discover the method by which civilian employment is authorized and funded. A search of last year's authorization and appropriations statutes fail to shed any light on the subject. Civilian strengths and programmed costs are well-hidden in O&M and other categories of defense programs.

Nevertheless, it is a fact that many military billets, now being manned or programmed to be filled by civilians, are vital to the mission of units that could be or are deployed overseas. In the event of an emergency mobilization or a hostile aggression, many of the civilian employees will either refuse to deploy or will seek evacuation.

"A key problem facing civilian personnel management concerns the retention in overseas areas of critical DoD civilians and contractor personnel following mobilization or hostilities," reports the Joint Chiefs of Staff.[9/]

Even if these civilians agree to deployment or retention under emergency mobilization or hostilities, the price-tag is substantially greater than that for an equal number of active servicemembers.[10/]

(Note: Advocates of increased civilian strengths may argue that the combined costs of a servicemember will be greater than that of a civilian employee when retired pay is projected in the total costs. However, this is true only in the case of related defense costs. If retired costs also are taken into consideration, the civilian employee will receive a much greater premium in federal disbursement than the military member of equal grade. DoD does not have to fund the government's share of the civilian's pension that is greater than the 7 percent contribution it makes during the civilian's employable years.)

Since there is a question of value related to many civilian billets in the event of mobilization or hostilities, NCOA has no choice but to recommend that priority consideration be given to building the active military forces before addressing civilian hires. NCOA believes it is time to "decivilianize" many of the current civilian billets that once were filled by uniformed personnel.

### Reserve and Guard

Increasing Reserve and Guard manpower strengths to off-set reductions in active military personnel is not the answer to maintaining the Nation's combat readiness. True, some monies could be saved, but at a tremendous sacrifice.

The Chairman, Reserve Forces Policy Board, said it best. "(A) reduction of Active Forces 'on the cheap'-- the transfer of missions to the Guard and Reserve without resources-- cannot be permitted to happen as it will exacerbate the problems of training, readiness, and responsiveness in both the Active and Reserve Components." [11/]

Recurring problems in equipment obsolescence and shortages coupled with diminitive training effectiveness and unit readiness precludes further build-up of Reserve manpower at this time. Reserve and Guard units must be provided adequate and modern equipment before they will be able to properly train existing personnel, not alone additional accessions.

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[9/] - U.S. Military Posture for FY 1983.

[10/] - See Averge (Costs) Per Individual in MANPOWER COSTS by CATEGORY appearing on page 1 of this statement.

[11/] - Before the Senate Armed Services Subcommittee on Manpower and Personnel, Mar. 15, 1983.

Of major concern within the Reserve force is the low strength of the Individual Ready Reserve (IRR). The reinstitution of a bonus program has been suggested to attract personnel to this component; however, NCOA recommends instead the adoption of legislation that amends the current obligated service commitment from 6 years to 8. Additionally, the Services might reinstitute the post-WWII recruitment of prior-service members into the Standby Reserve. They were reenlisted in the grade and occupational specialty held on date of discharge.

If these methods prove unsuccessful in revitalizing the IRR, Congress may consider using special bonuses at a later date.

Another concern with the Reserve forces appears to be the disproportionate size of its officer strength compared to the enlisted corps. In total strength, officers are nearly one-half the number of the enlisted force. These comparisons are shown below.

RESERVE PERSONNEL BY CATEGORY[12]

| CATEGORY | READY | STANDBY | RETIRED | TOTALS |
|---|---|---|---|---|
| OFFICER | 216,415 | 47,725 | 430,501 | 694,641 |
| ENLISTED | [illegible],142,465 | 4,370 | 408,048 | 1,554,888 |
| RATIO | 1 to 5.2 | 10.9 to 1 | 1 to 1 | 1 to 2.2 |

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[12] Source: DoD Selected Manpower Statistics FY 1982 (as of Sep. 30, 1982).

NCOA recommends that Congress review the current mix of officers and enlisted in the Reserve to determine whether they are adequate to meet the needs of the military for a mobilization requirement. Although it is necessary to have a large contingent of Reserve officers, the question is whether or not there are sufficient numbers of trained enlisted personnel; i.e.- aircraft mechanics, medical specialists, and etc; to support the officers recalled for mobilization.

## MILITARY PAY

The Association has given much thought to the President's recommended pay freeze. Consequently it has publicly denounced the freeze and, in concert with Senator William S. Cohen of Maine, developed a pay adjustment proposal that would increase the basic pay levels for noncommissioned and petty officers, pay grades E-4 thru E-9, for the active, reserve and guard forces.

The proposal, S. 335, would adjust the pay of E-4s by 2 percent, E-5s by 5 percent, E-6s by 4 percent, and E-7s thru E-9s by 3 percent. The rationale for adjusting their basic pay may be found in Sen. Cohen's introductory remarks.[13] However, the cost factors shown in the Senator's introduction, furnished by the Congressional Budget Office (CBO), have been revised downward. It is the Association's understanding that S. 335 will cost approximately $660 million in lieu of $827 million for FY 1984.

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[13] CONGRESSIONAL RECORD, pp S 800-S 802
Feb. 1, 1983

Since the introduction of S. 335 two significant actions have occured. The four military manpower chiefs have testified that if there is a pay increase in FY 1984 they prefer that it be "targeted". The House has approved its version of the First Concurrent Budget Resolution that provides for a 4 percent increase in pay for military personnel and federal employees. However, the chiefs and the Resolution have not agreed to or prescribed a method by which the increase if adopted would be paid. The Armed Services Committees, with the approval of Congress, probably will have to determine how and to whom it will be paid.

NCOA, of course, remains committed to its support of a pay adjustment for NCOs/POs whether or not a pay increase is finally approved by Congress.

Today, the United States is facing another crucial period in its post-Vietnam Era. Many of its battle-trained professionals have retired or abandoned their careers. Many of its experienced and skilled servicemembers opted to leave the military for a better life in the civilian sector. In a period of 5 years, 1976-1980, thousands of professional Soldiers, Sailors, Marines, Airmen, and Coast Guardsmen bailed out because of compressed pay, losses in compensation, too few rewards for attaining advanced grades, broken promises, and feelings of insecurity.

NCOA warned Congress again and again that this would happen but it wasn't until the Navy couldn't get its ships to sea and the Army was characterized as a "hollow one" that Congress reacted. Consequently, it provided substantial pay increases in both 1980 and 1981.

Simultaneously, Congress increased certain allowances, special pays and bonuses. It authorized (but did not fund) other programs that were important to career servicembers. And, along with the Administration, promised to keep pay "comparable" with the civilian sector. Never again, they said, would our military professionals have to worry about their future. Both were to be committed to improving the quality-of-life for those in the armed forces.

That was 1981. By 1982 the situation looked bleak. Once again promises were put on the back burner. Administration officials offered excuse after excuse but not many career active duty, reserve and guard personnel, were listening. It was the same old tune, only the names had changed.

For 1983-84, the Administration is proposing a pay freeze and (or will offer) changes to the military retirement system. In addition it will ignore the need to fund other "people programs" that are of concern to military personnel.

It boasts of high recruiting and retention rates that are better than ever, but are they? In FY 1975, 83 percent of career enlisted personnel reenlisted. For FY 1982 it was only 76 percent, up from a low of 68 percent in FY 1979. Still, there are shortages in the NCO/PO grades of experienced and skilled professionals.

Late last year the armed services yet were short some 40,000 NCOs/POs. The Navy alone had a shortfall of 17,000 with an anticipated shortage of more than 11,000 by the end of FY '83. That is, if all goes well.

In a recent conversation with a senior enlisted chief of a southern military installation, this NCOA representative was advised that far too many young NCOs, and some senior ones, are waiting for the civilian job market to again open up. He warns that they are ready to go at the first opportunity. The reason, he vows, is that too many promises are made but more are being broken. Regretfully, his views are shared by many other enlisted chiefs. They will tell you their career people are concerned-concerned with the lack of attention to or action taken on "people" programs mentioned later in this statement.

Four times in less than a decade military personnel have been subject to a "pay cap." To do so, they were told, was to set an example for the civilian sector. However, the Government Accounting Office (GAO) reported that the caps did absolutely nothing to change the attitude of civilian workers. While military personnel were suffering their first three pay caps, civilian employees were receiving double-digit pay hikes.

For FY 1984 military personnel have been asked to sacrifice for the fifth time by foregoing a pay increase. Recently, a high-ranking Defense official stated that the sacrifice was related to that which was going on in the private sector where people, like the auto workers, are not getting pay raises. Yet, U.S. NEWS and WORLD REPORT has this to say about the civilian sector:

> Detroit, with a 15.2 percent unemployment rate in Aug. 1982, shows a 4.7 percent increase in factory workers' income over a year ago with an average income of $25,076.
>
> Cincinnati, with a 10.4 percent unemployment rate in Aug. 1982, shows a 9.6 percent increase in factory workers' income over a year ago with an average income of $20,414.
>
> The United States, with a 9.8 percent unemployment rate in Aug. 1982, shows a 3.6 percent increase in factory workers' income over a year ago, with an average income of $17,305.

How does this compare with our military personnel? With a 4 percent hike in pay on Oct. 1, 1982, they now earn an average annual basic pay of $12,900 (or approximately $16,500 with allowances and special pays).

What is so disenchanting about the pay freeze is that military personnel are being told that they are not alone in this sacrifice. Everyone will be treated the same- or will they? For example; the private sector has not been asked to accept a pay freeze. In fact, many civilian firms are reported as again ready to pay salary increases in 1983.

NCOA, as stated earlier, recommends that a pay adjustment be given to NCOs and Petty Officers. Such an adjustment, if adopted, will lighten the concern of those who believe that a pay freeze will hasten the exodus of skilled and experienced members at a time when the Services are on the verge of significant improved retention in this area of personnel.

Retention is of much greater value to the Services at this time than the recruitment of new members. The high rates of unemployment for 17-to-24 year olds in the private sector should assure a strong input for the junior enlisted grades over the next year or so. Enlistment bonuses, quick promotions (from E-1 to E-3 in one year or less and to E-4 in 2½ years or less), training opportunities, and the possibility of a new education package will provide sufficient incentives for the Services' recruiting programs.

In consideration of a pay adjustment for NCOs/POs, some may ponder over a decision as to whether or not E-9s should be considered. Some will say that these most senior NCOs/POs are alike to the most senior officer grades- you do not worry about their retention rate. As related as they may be, there is one contrasting point that favors the E-9s; they are not rewarded as they assume greater authority and responsibility.

For example, officers advance in grade as they accept greater command responsibility. Captains, who are Company Commanders, normally advance to Lt. Colonel before assignment to command a battalion. Colonels are Regimental Commanders while Major Generals have Divisions, and on up to 4-star flag ranks to command a Service or a major organization.

On the otherhand, E-9s serve as Sergeants Major at all levels below the top enlisted Service slot and receive no additional monetary reward as they assume greater authority.

So there is justification to include E-9s but, frankly, NCOA does not believe this may be adequate for the situation. Congress should provide some type of "command responsibility pay" for E-9s who assume greater responsibility when assigned above the battalion level. This might be a "special pay" that is designed to increase as a higher command level is assumed. The pay also would decrease or terminate as the responsibility and authority of the E-9 was reduced as a result of reassignment to a lower command level.

For Example:

| SIZE or LEVEL of COMMAND[14/] | SPECIAL PAY (per month) |
|---|---|
| Battalion | None |
| Regiment | $100 |
| Division | $150 |
| Major Command | $200 |

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[14/] To be eligible, the E-9 must be assigned to the position of command sergeant major, fleet/force or senior command chief, senior enlisted advisor to the commander, or senior NCO/PO in charge of sections, divisions, or etc. above the size of a battalion.

Principally, then, NCOA is interested in seeing that compression in pay for NCOs/POs is addressed. NCOA does not object to and will support an across-the-board pay hike, but only if a pay adjustment of NCOs/POs is first appraised on the basis of need and necessity. This Nation can ill afford to lose the skills and experiences gained over the past few years by the current NCO/PO corps. If a 4 percent pay raise is adopted by Congress, the percentages recommended in S. 335 should be increased proportionately.

If a 4 percent pay raise is adopted by Congress, the percentages recommended in S. 335 should be increased proportionately.

NCOA has no recommendation to offer relative to the Warrant and Commissioned Officer grades. This it will leave to those who are qualified to comment.

## SPECIAL PAYS

Enlistment Bonuses. NCOA is concerned that enlistment bonuses have increased notably since their inception. In FY 1978 $34.1 million was given to 14,700 enlistees. By 1982, $130 million was divided between 38,762 enlistees. Currently there should be no major requirement for enlistment bonuses. The economy is such that recruiting goals should be attained without spending huge amounts to attract young people to the military services. Unemployment rates for recruitable-age youths are higher than the average; thus, making service enlistments, with their promise of skill training, more attractive than ever. Nevertheless, NCOA does commend Congress for extending the bonus authority. There may be a necessity to provide a bonus incentive to attract young men and women with higher educations and mental categories to certain skills and critical occupations. Then too, there will be a need for these bonuses when the economy improves and the eligible population of young men becomes smaller.

Reenlistment Bonuses. NCOA representatives have traveled far and wide visiting numerous military installations. On its question concerning reenlistment bonuses, these representatives found not one senior enlisted servicemember in favor of lump-sum bonus payments. NCOA so advised Congress of these findings only to be criticized by some of the military Services who preferred the lump-sum payments because they were more productive statistically than spreading payments over a period of an enlistment. Yet, NCOA will stand by its earlier position that lump-sum payments in too many cases produce mediocre performances and personal financial problems once the bonus pay is exhausted. Some senior Service officials have countered with accusations that senior enlisted personnel were envious because they were not entitled to the bonus money and this was the true basis for their opposition. However, NCOA disagrees. It believes that senior enlisted personnel are principally concerned with performance and the fact that they are not eligible for generous bonus payments plays little if any part in their views. Not one disagreed to paying the bonuses over the period of enlistment. Senior NCOs/POs are interested only in getting the best for the money spent. NCOA also recommends that Selective Reenlistment Bonuses (SRBs) not be paid to servicemembers for any period of an enlistment not spent in their bonus-eligible specialties. NCOA believes substantial pay adjustments for NCOs/POs will do much to retain career personnel in the armed forces without the use of reenlistment bonuses amounting to hundreds of millions of dollars. However, the fact that increases in basic pay have a parallel effect on retired pay in later years, may force Congress to continue reenlistment bonuses in lieu thereof. Congress recently approved an extension of the bonus authority and NCOA is in hope that Congress will continue to oppose lump-sum payments unless they are provided to personnel who are critically needed in shortage skills. All others should receive payments over the term of their enlistments.

Separation Pay. In reviewing military manpower statistics it is apparent that there is a disproportionate number of nondisabled officers than enlisted personnel on the retirement rolls. In retrospect, the strenths of the enlisted force should produce a greater number of retirees than that of the officer corps. This not being the case, the question, "Why?", comes to mind. Is it circumstantially evident that some Services, at appropriate periods since WWII, rid themselves of NCOs/POs under the guise of reduction-in-force or "qualitative management" programs? Does forcing NCOs/POs to leave the Services surpress personnel costs that eventually provide more funds for retiring its officers? It does take little to discharge a NCO/PO while "RIFing" an officer can cost as much as $30,000. .... NCOA for years has sought fair and equitable legislation that would authorize severance pay for regular enlisted personnel with 5 or more years of active service who are denied reenlistment. Many are not career-suited and lack ability and potential for promotion, but were there when needed and served their country in an acceptable and honorable manner. They deserve some payment for their services and to assist in their return to civilian life. Quite a number of them are not trained in civilian-related skills and face "tough times" in readjusting to a civilian environment. ... Some years ago DoD justified its opposition to enlisted severance pay claiming that enlisted personnel were entitled to a maximum payment of up to 60 days for unused leave at the end of each enlistment. Officers, however, were entitled only to 60 days over a career. That justification no longer exists. In 1976 Congress amended the law by placing the same restriction on enlisted personnel for the amount of unused leave payments as that applicable to commissioned officers. Since DoD's justification for denial has passed into history, it is no longer fair or equitable to offer severance payments to all U.S. federal workers, including foreign nationals,[15] to commissioned officers and reserve enlisted personnel but not to regular enlisted men and women of the armed forces- even if they have 19 years, 11 months and 29 days of honorable active service. It is well past the time for Congress to address this deplorable situation. Just two years ago Congress enacted the Defense Officers Personnel Management Act (DOPMA). It increased the maximum amount of severance payments to officers from $15,000 to $30,000. Based on this and the other facts outlined herein, NCOA recommends that a severance payment be provided to regular enlisted personnel whose services to their country and corps have been as significant and as honorable as that of commissioned officers who find their services no longer required in the armed forces.

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[15] U.S. government funded payments to foreign nationals was estimated to be $210 million in FY 1983. All this for foreign nationals but not one cent in tribute to our own servicemembers who once sorely needed are turned out of the Services before retirement.

Incentive/Hazardous Duty Pay. The current system of making payments to servicemembers performing duties involving certain hazardous risks is an archaic one. Alike to severance payments that appear supportive of an officer's worth over that of an enlisted member, some hazardous duty pay gives credence to the idea that the life and limb of enlisted personnel is of lesser value than those of commissioned officers. As in most occupations there are certain values attached to all levels of the work force. Although much money may have gone into educating a young but new supervisor/manager, a skilled foreman with years of experience may be of greater value. So it should be with the armed forces. There isn't much doubt that a good senior NCO/PO is of far greater need to the military than a new second lieutenant. Yet, the latter may be entitled to a greater amount of hazardous duty pay than the former. For example, two servicemembers parachute from a plane. One is a lieutenant, the other a senior NCO. The lieutenant receives $110 per month while the NCO earns $83. Both were ordered out of the plane by the jumpmaster. Neither will have any contact or command over the other while descending. Both will be encountering identical risks. So why the need for different rates of pay?.... The inequity of the system is further compounded by providing a higher rate of incentive pay to a flight surgeon or nurse than to an enlisted flight engineer. The latter is responsible for maintaining the mechanical functions of an aircraft while the surgeon or nurse is in no way remotely responsible for any part of the aircraft or its crew. NCOA does not suggest that the pays for commissioned officers be reduced, but it does recommend that Congress increase the pay of senior NCOs/POs to more equitably address their worth to the Services in incentive/hazardous duty specialties.

Foreign Duty Pay. Foreign duty pay has not been increased for years. When first authorized in 1949, foreign duty pay approximated 10 percent of enlisted basic pay. Currently it is about 1 percent. In keeping with accepted industry practice for disagreeable or unpleasant work and as a morale factor,[16/] legislation should be enacted increasing the rates particularly for enlisted members serving on foreign duty or deployed aboard ships who are not entitled to other overseas allowances or special

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16/- Third Quadrrenial Review on Military Compensation, Aug. 1976.

pays. NCOA recommends at least a 250 percent increase to nearly match the CPI increases recorded over the 34 year period. If adopted, rates of pay would be increased as follows:

| GRADE | FROM | TO |
|---|---|---|
| E-1, E-2 | $ 8.00 | $28.00 |
| E-3 | 9.00 | 31.50 |
| E-4 | 13.00 | 45.50 |
| E-5 | 16.00 | 56.00 |
| E-6 | 20.00 | 70.00 |
| E-7 thru E-9 | 22.50 | 78.75 |

Sea Pay. NCOA recommends that Congress authorize increased payments to enlisted personnel at the 13-year and 20-year levels. With longer tours of duty at sea caused by PO shortages and increased missions for the Navy, more and more POs in the upper years of service must have a greater incentive to remain at sea for prolonged periods.

Special Pays for Independent-type Duties. If one has not served in an independent-type duty assignment (i.e.- recruiting, training reserves, or ROTC), especially that which is not within commuting distance of a military installation, he or she cannot appreciate the need for extra compensation when a family attempts to live on the local civilian economy. Variable Housing Allowances (VHA) helped considerably to offset housing costs but these decreased in value in 1982-83 and appear to be dropping further for 1983-84. Some special pays have aided, but the loss of military commissary, exchange, morale, welfare and recreational, and medical facilities far offset these pays. Recruiters; active duty, Reserve and Guard; as well as all independent-type duty members can suffer serious financial difficulties when faced with expensive medical care for a dependent or dependents. NCOA recommends that special pays for these servicemembers be increased to adequately offset the greater financial responsibilities assumed while serving in this type assignment. If nothing else, Congress should approve 100 percent CHAMPUS care for their dependents.

Lump Sum Death Benefits. Current benefits have remained unchanged since 1956. Needless to say, the value of the benefits have diminished two-fold since that date. $800 to $3,000 is no longer realistic in today's economy. NCOA recommends that the benefits be increased at least to twice their current sums.

Hostile Fire Pay. Hostile Fire Pay was first offered by Congress in 1952. It was and is paid to servicemembers serving in hostile environments. The Fifth Quadrennial Review of Military Compensation (5th QRMC) is reported as favoring a change of name for this pay and in eligibility requirements plus an increase in the payments. Only persons likely to engage in combat would receive the extra pay. NCOA has no quarrel with the 5th QRMC suggestion but believes Congress should address the authorization of this pay to peace-keeping troops, such as those in Lebanon who face an almost daily threat of confrontation with foreign forces. In such a case, servicemembers would receive hostile fire pay in addition to foreign duty pay, unless the former is increased substantially to a level where it will not be necessary to pay both amounts to compensate for disagreeable, unpleasant and precarious duties.

## ALLOWANCES

Permanent Changes of Station. Any number of allowances may be included within the peripheral boundry of PCS; i.e.- Travel and Transportation, Per Diem, Temporary Housing Allowances, Household Goods Weight Allowances, Storage, Family Separation Allowances, Dislocation Allowances and Overseas Station Allowances. Nearly one-third of the military community moves annually on government-issued orders. Yet, their reimbursements and allowances will amount to about only one-third of the costs incurred during the move. In relation to a federal civilian employee in grade GS-9, for example, the Air Force has compared his entitlements with those of a servicemember, pay grade E-7, when moving coast-to-coast with three dependents for each. The GS-9 will receive $15,055 while the E-7 is paid but $1,632. NCOA can only recommend that Congress act now to correct this wide disparity and cease the discriminate treatment of our servicemembers. All entitlements for both the civil servant and the uniformed servicemember should be equitable. Certainly each deserves as much as the other when ordered to move by the federal government. It simply is unjust and totally inequitable to provide less for a servicemember than for a civil servant just because the former will be ordered to move more often than the latter.

Household Goods Weight Allowances. NCOA recommends an increase in the allowances to reflect grade and years of service rather than grade itself. It is inequitable to provide a greater allowance for junior officers than for senior NCOs/POs. The latter probably will have been married longer, have a larger and older family and possess more household goods. The Senate Appropriations Committee reported last year that current allowances "appear adequate and reasonable;" however, NCOA as well as senior NCOs/POs fail to agree. Appearances are deceivable, adequacy is determined by the size of the family, and reasonableness is in the eye of the beholder. For example, is it reasonable to allow a GS-9 civil servant 11,000 pounds of household goods while limiting the E-7 servicemember to 8500 pounds? NCOA believes not and, thus, urges this Congress to take the appropriate action to change the current archaic system that is neither adequate nor reasonable.

Storage. NCOA recommends the reimbursement of storage costs for privately-owned motor vehicles when members are assigned overseas where vehicles are not permitted or restricted or when deployed for more than 30 days.

Travel and Transportation (other than for PCS). NCOA recommends that Congress authorize and fund; 1)- more lenient travel entitlements for personnel assigned to ships in overhaul; 2)- transportation of the remains of retired members who die while hospitalized at a military hospital, 3)- transportation for rest and recreation for members assigned to remote stations, and 4)- transportation for immediate next-of-kin of members or dependents hospitalized overseas whose presence is required by a competent medical authority.

Per Diem (TDY). NCOA recommends that Congress authorize flat-rate per diem reimbursements commensurate with area costs for moderately-priced lodging and meals, and permit enlisted personnel to submit travel vouchers as proof of receipt of per diem (as now authorized commissioned officers). Also, fund equitable per diem payments to enlisted members as authorized by P.L. 96-513.

Variable Housing Allowances (VHA). Since its inception in 1980, VHA no longer lives up to its purpose-- to financially assist servicemembers in paying off-base housing costs in CONUS that are more than 115 percent of their Basic Allowance for Quarters (BAQ). Last year's cap on inflation increases for VHA, plus a cap on a military pay hike for FY 1983, left many servicemember's short of monies budgeted for other household needs. For FY 1984 the Administration has asked for a "freeze" on any increases in VHA or military pay. However, housing costs have not been frozen and no such freeze is expected within the civilian community. NCOA recommends that an increase at least in the amount of the CPI average for 1982 be authorized for VHA that is now 119.3 percent of BAQ rather than 115 percent. Also, NCOA urges Congress to take into consideration seasonal changes in housing costs that may not be reflected in military surveys taken during off-season periods. Many areas attract tourists and local prices fluctuate substantially during on-and-off peak seasons. Servicemembers moving into one of these areas during the busy tourist season may pay more for renting a house than the one who did so during the off-season period.

## MISCELLANEOUS

All servicemembers are entitled to basic pay or retired pay. Not all are in receipt of the various special pays and allowances authorized by Congress. However, all are entitled to certain privileges when available. These privileges or benefits rank higher in importance for most military families than special pays and allowances, many of which are no more than "pocket money." The use of medical facilities, commissaries, exchanges, recreational and morale facilities, and legal counsel are major factors in retaining skilled and experienced servicemembers in the armed forces. If a servicemember's spouse is happy, he or she will encourage the member to remain in the military. Thus, it is important that Congress continues to recognize the value of these benefits and adequately fund for those that require federal subsidies. Past and present servicemembers have been promised these benefits as a part of their commitment to remain in the service for 20 or more years. Congress should not hesitate to honor what has been promised. Threats of terminating or reducing the benefits only tend to discourage personnel when asked to stay in the military for another tour of duty. NCOA recommends that Congress adequately fund these benefits, including the Civilian Health and Medical Program (CHAMPUS), for FY 1984.

## Dental Care

NCOA also recommends that Congress consider authorizing and funding a CHAMPUS Dental Program for dependents of active duty personnel.. Many civilian businesses now offer dental programs to their employees at no cost with small monthly payments to enroll their families. With the marriage rates in the armed services increasing more and more in an AVF environment, a dental program for dependents is becoming an item of necessity. Many of the younger servicemembers are asking for the program.. If it is that important to them, then it will be a major point of consideration when it comes time to reenlist. NCOA urges early action on this recommendation.

## Impact Aid

NCOA is aware that certain committees other than defense-oriented panels have oversight authority on impact aid to schools that have enrollments of dependent children of uniformed personnel. However, past experiences have proven that denial of this aid causes many schools to threaten disenrollment of these children if the parent servicemember does not pay a tuition. NCOA believes that these actions cause such an upheaval in family morale that it threatens the very existence of a well-disciplined and dedicated military community. When parent servicemembers cannot concentrate on their duties because of personal family problems forced upon them by the very government that needs their services, unit and personnel readiness suffers. When this occurs, then NCOA believes it becomes a matter of consideration for the Committees on Armed Services and Appropriations (Defense). Hopefully, these committees will see the impact that such actions have on military readiness and react accordingly. If need be, NCOA urges the authorization and funding of a "contingency fund" that may be used by DoD to deter such threats or acts of disenrollment by schools that do not receive adequate impact aid in FY 1984.

## RETIRED PAY

The number of actions taken by Congress in the last decade to reduce the costs of military retired pay is far greater than those adopted for other federal retirement systems. More than 20 separate measures have been enacted to hold back the amount of appropriations that are necessary to continue paying former servicemembers who have served their commitment, as prescribed by Congress, in an honorable and devoted manner.

Of them all none was more deceitfully conceived than the unfair, inequitable, and discriminate provisions adopted last year to reduce the annual COL adjustments for military and federal employees under the age of 62, and the reduction in salaries of certain federal workers equal to an amount of COLA increases received in their military retired pay. NCOA cannot believe that the members of Congress would agree to such a measure if they were aware of the facts. It is difficult to understand how Congress could deny a military servicemember who fought in three wars, or even two or one, a full cost-of-living adjustment to his retired pay while granting someone, who may have never served in a war or in the military service, a full adjustment simply because he or she is 62 years of age.

Most military members serve their country as long as they are needed. Some do it in 20 years, others longer but, for the most, their "voluntary" retirement before 30 years comes as a result of their Service's personnel management program-- not of their own choice.

There is, of course, much more that can be said in favor of the current military retirement system and the retirees it spawns. But it is doubtful that what has been done will be undone. For the most, military retirees will face the three year moratorium with dignity and the acceptance that their Nation is in need. They will ask; however, that when the FY 1986 budget is under consideration, their sacrifice not be forgotten as easily as the ones they endured in the past.

Almost a decade ago, this Association in consort with others, implored Congress to recompute retired pay so that it would be based on basic pays provided to active duty members who were the retirees' counterparts of equal grade and time in service. Congress refused saying it would cost too much money. Instead, Congress continued to remain with the current system. Now it costs more than if the recomputation measure had been adopted. It was a fair and equitable method to reward former servicemembers. All of equal grade and time in service would receive the same amount of retired pay regardless of date of retirement.

The present system over the years has developed unreasonable and inequitable pay rates for retired members. Some do not receive a fair payment. A few receive more while others are paid varied amounts that are either a bit more or less than their counterparts retiring today.

All of this boils down to a simple fact. Congress too often doesn't listen to experience but chooses to consider only statistics. In its enthusiasm to reduce costs it considers numbers and dollars saved today as more important than what may be earned in the future.

Fortunately, Congress did not allow statistics to dazzle its pursuit of reform measures that will save the social security program. It should apply the same method in considering the military retirement system. It has hacked away at military retired pay with but one thought in mind- how to cut back on its costs. Instead, it should be pursuing a way to save the system by adopting reform measures that will make it sufficiently attractive to invite future military personnel to want and make the armed forces a career.

In this respect, NCOA urges Congress to leave the military retirement system as is. No more adverse actions should be adopted, including those offered by the Administration, until the Fifth Quadrennial Review of Military Compensation study, due this Fall, is reviewed and considered.

NCOA does not believe this is too much to ask for those who have honorably served their Nation according to the laws established by Congress.

### CONCLUSION

Mr. Chairman. I extend the Association's appreciation for allowing me the privilege of speaking for its membership. I know that the list of recommendations herein appear to be extensive, however, NCOA believes that over the long run the federal government will save money by retaining quality personnel and, thereby, reducing recruiting, processiong, training, and schooling costs for replacements.

## GEORGETOWN UNIVERSITY

### STATEMENT OF FATHER T. BYRON COLLINS, S.J., GEORGETOWN UNIVERSITY

### ACCOMPANIED BY OREN FOUST, MANAGER, CORPORATE DEVELOPMENT, EBASCO SERVICES INCORPORATED

### STRIDES IN LAST YEAR'S PROGRAM

Senator RUDMAN. The next witness will be Father T. Byron Collins of Georgetown. Father Collins, welcome.

Reverend COLLINS. Good morning, Senator. I appreciate, and it is a pleasure to be here. With me is Oren Foust, manager, corporate development, EBASCO.

To be very brief, the program that we presented last year, we have made quite some strides in it, and there are key elements in it that are critical. The first is we propose an exemplary planning program with the Department of Army, in coordination with them, that takes coal gasification to fuel cell to cogeneration with a mix of Department of Defense funding and commercial funding, with a plan that in the out years the commercial funding takes the entire responsibility, with no funding from Department of Defense.

We propose three sites, sites we have reviewed with the Army Corps of Engineers: one in Alaska, one in Pennsylvnia, and one in the appropriate university site in the District of Columbia.

The amount of the request is $820,000. Georgetown from its resources has put up over $900,000 in this program, planning the exemplary program. So this is the essence of it, I believe the key parts.

If there are any questions I would be glad to answer them.

[The prepared statement of Father Collins follows:]

# PREPARED STATEMENT OF FATHER T. BYRON COLLINS, S.J.

## GEORGETOWN UNIVERSITY

### COAL GASIFICATION - FUEL CELL COGENERATION SYSTEM

Georgetown University testified before your appropriations committee last year on a cogeneration plan, which would involve certain defense installation projects to be conjoined with a project at Georgetown University.

Since that time, Georgetown University, working with Ebasco, has done further explorations and has now arrived at what seems to be a feasible cogeneration program. The essence of this program is to use coal to drive a gasification unit to drive a fuel cell. This felicitous combination will produce electricity and heat in sufficient amount for use by defense installations, especially Army installations.

As you know, the Army Corps of Engineers has a conversion and replacement fuel program for numerous Army sites.

Georgetown University proposes to work with Ebasco in the specific analysis of several Army sites, including one in Alaska and one in Pennsylvania, which would establish the necessity and economic viability for these sites to have the coal gasification - fuel cell cogenerator installed. The method of funding the next and final step (installation) would include a DOD grant, funds supplied by the local utility company, and funds supplied by other investors.

The use of several sites, which would have installation as a packaged program, would decrease the amount of the Federal Grant per site and increase the funds from resources other than the Federal Grant. To achieve the above, we would ask your support in your appropriations committee of approximately $820,000 as a grant to Georgetown/Ebasco to develop the specifics of the plan. For your information, Georgetown University has expended approximately $900,000 from its own resources to develop the plans thus far that would be made available to all of the Defense Department specific sites.

The purpose of this program is to take the first major step toward the installation of this cogeneration system at Defense sites where the future cost to DOD would be at 30% of the total installation cost and 70% provided from outside resources. In the initial program, however, these percentages would probably be reversed. Ultimately, when these systems become fully commercial, all costs would be provided by outside resources. Thus this exemplar program would provide an effective method for meeting the conversion and replacement programs for the Army, as well as the Air Force and perhaps the Navy. In addition, when system reliability has been established through several years operation experience, we believe it would be used extensively by industrials and others.

To place the program into a broader perspective, and also to strengthen its justification, one significant result from the recent joint investigation by Georgetown University and Ebasco was that the need for a suitable coal consuming energy system may be greater even than was previously believed. To illustrate this point, the DOE sponsored a study in 1981 to estimate the 10 year potential for industrial cogeneration using the hurdle rates typically used by industries to justify investments. One of the results from that study was that the five industries which account for about 75% of energy consumption for all of the manufacturing industries would install cogenerators between 1981 and 1991 which would produce about 135 million lb/hr of steam and would result in more than 12,000 MW of electric generating capacity.

Recently, the DOE has contracted to have this study repeated for the 10 year period between 1983 and 1993. The final report, which will be published soon, estimates that these same five industries will install cogenerators during the 1983-1993 time period to produce about 145 million lb/hr of steam resulting in about 22,000 MW of electric generating capacity.

The significance between the 1981 and 1983 studies is that the 1983 repeat analysis predicts a near doubling of electric generation capacity resulting from only a slight increase in steam demand. The reason for this is that in 1981 industrials planned high usage of coal fueled steam turbine systems while in 1983 they plan high usage of gas fired turbines with exhaust heat boilers; the electric-to-thermal ratio is much higher for a gas turbine with exhaust heat boiler than for a steam turbine system.

The apparent reasons for this shift away from higher coal consumption is that the current predictions indicate that future oil and gas prices will be at a lower level than had been previously forecasted, while at the same time the high capital cost and the siting problems associated with coal fired installations are not likely to improve in the future.

Industrials and other businesses generally will invest only in technology which has a proven track record. While the installation of industrial cogenerators are expected to save more than two quads of energy during the next 10 years, and are expected to displace perhaps 200,000 barrels/day of oil by 1993, gas consumption is expected to increase to a level which will offset the decrease in oil consumption; during the same time period, coal consumption is expected to be less than had been previously forecasted.

The Georgetown program is geared towards changing the primary energy use patterns towards coal and away from fluid fossil fuels. Already, our first major stage in this direction has proved successful. With the information generated during our fluidized bed demonstration, the manufacturer has improved its design, has recently installed a commercial cogenerating unit, and has now placed the fluidized bed unit on the market at commercial prices and with performance warranties. Within a few years, after establishing an operations history, most forecasters believe that the coal fired fluidized bed combustor will become a big ticket item.

For the final phase in Georgetown's program, the emphasis is on demonstrating the feasibility and economic viability of using coal to drive a fuel cell. If this demonstration proves successful as did the fluidized bed demonstration, then before the end of this decade two major coal consuming systems, both sponsored by Congress, will have a track record in the commercial marketplace.

As you know, in most programs of this type, the government is requested to fund the full costs. In our program, Georgetown with Ebasco would undertake the immediate program of planning multiple sites including Georgetown University and would conduct an investigation to attract third-party financing for a significant percentage of these first units. However, we believe that without the participation of Georgetown the packaging and planning of this program will never occur. Georgetown has an excellent track record with the Federal Government in Energy Conservation Projects.

## ATTACHMENT 1: Georgetown University's Energy Program

## I. GEORGETOWN UNIVERSITY'S ENERGY PROGRAM

### A. INTRODUCTION

The current global energy crunch was initiated by the OPEC Oil supply and price crisis of 1973. This sudden action forced society to acknowledge that the world's current economy largely depends on adequate supply of fluid fossil fuel, a finite commodity. The spiraling increase in oil prices following the initial crisis, and the subsequent doubling of oil prices during 1979 and 1980, has caused economic shocks of major magnitude. Even now, the ultimate impact on society resulting from these severe economic perturbations is not fully understood. To adjust to this energy depression, each energy-using segment of our society (transportation, industrial, residential, commercial and institutional) has been rapidly changing energy use patterns. These patterns have been towards energy conservation and more efficient energy systems and away from energy waste.

Georgetown University is among over 700 urban colleges and universities located in communities of 250,000 or more residents; and Georgetown is confronted with the same energy problems that confront most similar institutions. The cost of electricity since the mid-1970s has increased in some parts of the country by over 300 percent. In this same period, the cost of fluid fossil fuel for producing thermal energy has increased even more.

When the energy crunch first became evident in 1973, Georgetown acted quickly to assess the situation. Several different types of integrated energy systems (cogenerators) were being demonstrated in the country that showed promise; some types were weeded out by Georgetown, and the systems which were judged most promising were selected by Georgetown to install and operate as an example which could be followed by other institutions.

The Georgetown approach is consistent with the National Energy Policy and exemplifies what can readily be adapted for use at colleges and universities, medical centers, commercial complexes, military bases, and other similar communities.

Currently, Georgetown is at a crossroads in its eight-year-old demonstration program. After notable success to this point in time, Georgetown is now thrusting forward toward the final and most important phase - a multimegawatt coal gasification-fuel cell installation. This coal gasification-fuel cell installation will be tied to the other demonstration systems as the final step in completing a fully integrated energy system.

## B. NATIONAL EXEMPLAR INTEGRATED SOCIO-ENERGY SYSTEM (NEISES)

The initial thrust of Georgetown's energy program consisted of establishing conservation measures and the development of a long-range plan for cogeneration. Since its initiation, conservation measures have resulted in energy reductions of 50 percent in heating and 30 percent in electricity.

The first phase of Georgetown's cogeneration energy initiative, started in 1974, consisted of a $10MW_t$ Atmospheric Fluidized Bed combuster (AFB) to burn high-sulfur coal. The AFB was funded by the Federal Government and has been in operation since 1979. The U.S. Congress established the AFB as a national exemplar for institutions similar to Georgetown. Currently, Georgetown is designing a 2.5 MWe electric generating cycle to the AFB.

The second phase of Georgetown's plan consists of a 300 kWe solar photovoltaic system, funded by the Federal Government, now under construction. The U.S. Congress established this sytem, too, as a national exemplar for institutions similar to Georgetown University.

The third phase, currently in the design process or under consideration, and also funded by the Federal Government, consists of thermal storage systems, an electric-powered transportation system and a sewage-to-methane system.

The fourth and final phase of the long-range plan consists of the coal gasification-fuel cell installation and an interconnection of all the systems into a National Exemplar Integrated Socio-Energy System. This fourth phase will be executed in three steps. (Step 1 has been completed from funds in the form of a grant by the John A Hartford Foundation to Georgetown University.)

Step 1: Develop an implementation plan for resolving utility, institutional, legal and regulatory issues required to establish an ownership-operating business arrangement between Georgetown University and the local utility which would be of benefit to the affected parties.

Step 2: Perform facility planning which will provide a plant conceptual description, cost estimate, economic-financial analysis, and third party financing and equity position for the Georgetown Coal Gasification-Fuel Cell System, and separately for each of two similar coal gasification-fuel cell cogenerators located at selected army sites.

Step 3: Perform the detailed plant design-engineering, test-operating procedures, procurement of fuel cells and equipment, installation of the system, startup-test and operation, periodic reports on system operating cost and reliability data at Georgetown and the two army sites. (Performing this step assumes that Step 2 results in favorable future economics of the system and a reasonable probability for eventual third party financing and equity positions.)

## ATTACHMENT 2: SCOPE OF SERVICES

### TASK I: FUEL CELL AND COAL GASIFICATION FACILITIES PLANNING

The objective of this task is twofold: first, to prepare for the GU system a conceptual plant description, plant layout and general arrangement, project plan and cost estimate; and second, to perform the same tasks for each of two fuel cell - coal gasification facilities for selected Army sites (one in Alaska and one in Pennsylvania). Much of the fuel cell system information will be obtained from the manufactures and past EPRI studies, and most of the coal gasification system information will be taken from an indepth study now nearing completion at EPRI.

## A. GEORGETOWN FUEL CELL AND COAL GASIFICATION FACILITIES PLANNING

### 1. Fuel Cell and Gasification Plant Description

A conceptual design description will be prepared comprised of the following features:

a. Function and design requirements.
b. Conceptual system design description.
c. Operation requirements including coal handling feasibility definition.
d. Casualty events.
e. Maintenance requirements.

### 2. Fuel Cell and Gasification Plant Conceptual Layout/Arrangement

a. Fuel cell and gasification plant.
b. Interface with other systems.

### 3. Project Plan for Final Design, Installation and Startup

a. Develop work breakdown by tasks.
b. Prepare schedule.

### 4. Fuel Cell and Gasification Plant Conceptual Cost Estimate

a. Fuel cell and gasification plant with interface hardware.

b. Project procurement, implementation, installation and start-up.

## B. ARMY FUEL CELL AND GASIFICATION FACILITIES PLANNING (SITE 1)

(Same tasks as performed above).

## C. ARMY FUEL CELL AND GASIFICATION FACILITIES PLANNING (SITE 2)

(Same tasks as performed above).

## TASK II: FUEL CELL AND COAL GASIFICATION FACILITIES BUSINESS ASSESSMENT

## A. BUSINESS ASSESSMENT FOR GEORGETOWN FACILITIES

The two parts of the business assessment are:
1. to determine cost figures (including those from Task I), operating characteristics, cost of generating electric and thermal energy, and
2. to perform an economic-financial analysis resulting in expected cash flow and ROI.

### 1. Cost/Benefits/Issues Determination

The expected operating characteristics, cost and benefits will be determined for the following elements:

- o Historical electric/thermal energy use/cost.
- o Projected future electricity demand.
- o Projected future cost of electricity from utility.
- o Projected future avoided cost for excess electricity (buyback rates).
- o Projected future thermal energy demand.
- o Projected future thermal cost by current method.
- o Estimated plant costs (life of plant).
  - Capital costs through start-up
  - O&M costs
  - Grid interconnect equipment cost
  - Fuel costs
- o Estimated plant availability.
- o Maintenance planning and downtime.
- o Estimated cost for backup power (scheduled and emergency).
- o Construction time.

2. Economic-Financial Analysis

The desired result is to determine the site-specific profitability (cost of energy without fuel cell cogeneration minus cost of energy (plus income) with fuel cell cogeneration), using the input information obtained from the previous task:

- o Capital Requirements
  - Cost of plant and related equipment.
  - Start-up costs.
  - Working capital.
  - Legal, financing and engineering.
  - Other project-related costs.

- o Production Forecast
  - On-site electric power demand.
  - On-site thermal energy demand.
  - Excess electric power sold to utility.

- o Operating and Maintenance Costs for Life of Plant

- o Financing Plan

- o Projected Financial Statements

- o Profitability
  - Discounted cash flow analysis.
  - Interest coverage.
  - Debt service coverage.
  - Breakeven point.
  - Payback period.

- o Risk and Sensitivity

## B. BUSINESS ASSESSMENT FOR ARMY SITE FACILITIES (SITE 1)

(Repeat the above tasks described for GU).

## C. BUSINESS ASSESSMENT FOR ARMY SITE FACILITIES (SITE 2)

(Repeat the above tasks described for GU).

## TASK III: FINANCING, OWNERSHIP/OPERATING INVESTIGATIONS

The premise is that the first few fuel cell/coal gasification plants will cost about three times as much as the fully commercial items. On this premise, these first plants are expected to be fund-supported by the Army at 70% of capital cost. Using the remaining 30% cost figures (information from previous Tasks I and II), and the full benefits (profitability, risk and sensitivity analysis), an investigation will be made to determine if third-party groups can be arranged to own/finance the plants at 30% of total capital cost for full equity.

Since the second plant will cost less than the first, and the third will cost less than the second, it will be necessary to prorate the cost of each based on the cost of all three.

In arranging ownership/operating options, the local utility company at each site will be invited to participate. The third-party owner group for each plant preferably will consist of the appropriate mix to qualify for full PURPA and tax benefits. Financial institutions will be canvased to determine if 70% to 80% of the total plant cost (minus the 70% funded by the Army) can be financed. The third-party owner group then would invest the remaining 20%-30%; it is expected that tax benefits may be used to raise most of the investment required by the third-party owner group.

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## ATTACHMENT 3: Benefits To The Army

### BENEFITS TO ARMY OF TECHNOLOGY TRANSFER FROM GU-NEISES

- SPECIAL BENEFITS TO ARMY
  - RELATIVE ENERGY INDEPENDENCE AT BASE
  - REMOTE SITE (BASE) APPLICABILITY
  - SECURITY/SAFETY CONSIDERATIONS (E.G., UNDERGROUND)
  - ENERGY SUPPLY/UTILIZATION SIMILARITY
  - SIMILAR (NEISES) TECHNOLOGY DEVELOPMENT EFFORTS
  - MODULAR EXPANSION AND RELATIVELY SHORT CONSTRUCTION PERIOD
  - ENHANCEMENT OF CONSTRUCTION AND INTEGRATED FACILITIES PLANNING FOR ALL SERVICES
  - THIRD-PARTY INVESTMENT, OWNER/OPERATOR
  - IMPROVED EFFICIENCIES, LESS ENERGY COSTS
  - SWITCHING FROM OIL AS PRIMARY FUEL
- FUEL CELL ADVANTAGES
  - MODULAR, TRANSPORTABLE
  - MULTIPLE FUEL CAPABILITY
  - RELIABLE/MAINTAINABLE

  - EFFICIENT, QUIET
  - MULTIPLE APPLICATIONS
  - LOWER THERMAL SIGNATURE THAN DIESELS/TURBINES

- PROGRAM ADVANTAGES
  - IN-PLACE, JOINTLY FUNDED
  - EASILY INTEGRATED WITH ELECTRIC UTILITY INDUSTRY
  - LOWER ("PIGGYBACK") COSTS
    - START-UP
    - CONSTRUCTION/INSTALLATION
    - DEBUGGING/MAINTENANCE
    - OPERATOR"HANDS-ON" TRAINING
    - CAREER DEVELOPMENT
- SYNERGISTIC COMMUNITY-DEVELOPMENT ADVANTAGES
  - THIRD-PARTY INVESTMENT ASPECTS
  - INTEGRATED LOWER OPERATING COSTS
  - DIVERSITY OF APPLICATION

### PREVIOUS YEAR FUNDING

Senator **RUDMAN**. Well, Father Collins, we are familiar with the project. I recall your testimony from last year. I was just asking staff as to what funding was furnished last year, in addition to the Georgetown funds.

Reverend **COLLINS**. We did not receive any, did not press it, because until we got Ebasco on as a partner—we now have the capability of fulfulling each of the things that are the key elements of it.

Senator **RUDMAN**. So this is really the year you are coming in with the funding for the DOD?

Reverend **COLLINS**. Yes, Senator.

Senator **RUDMAN**. I think we have a good understanding of the project and the needs and the history of it. You have done a good job in bringing that to our attention. We appreciate your being here this morning.

Reverend **COLLINS**. Thank you.

## NAVAL RESERVE ASSOCIATION

### STATEMENT OF CAPT. JOHN H. BELL, U.S. NAVY, RETIRED, LEGISLATIVE CONSULTANT, NAVAL RESERVE ASSOCIATION

### ACCOMPANIED BY REAR ADM. JAMES E. FORREST, EXECUTIVE DIRECTOR, NAVAL RESERVE ASSOCIATION

#### NAVAL RESERVE MISSIONS

Senator RUDMAN. Our next witness will be Capt. John H. Bell, U.S. Navy, retired, Legislative Consultant, Naval Reserve Association.

Good morning, Captain Bell.

Captain BELL. Thank you, Mr. Chairman.

Senator RUDMAN. You may proceed with the summary of your statement. The entire statement will be printed in the record.

Captain BELL. Thank you, Mr. Chairman. We are again indebted to you for allowing us to appear here today.

With me is Rear Adm. Jim Forrest, our Executive Director.

We dedicated a considerable portion of our testimony to naval reserve missions, present and proposed. If the Congress is serious about expanding the Guard and Reserve roles, then the support must be provided. Too often in the past, the missions have been assigned to a Reserve component without the assets with which to accomplish the tasks inherent to the mission. When the support is provided, the Reserve and Guard unit, with the same equipment, can equal or outperform its active counterpart any time.

#### NAVAL RESERVE STRENGTH

Secretary of the Navy John Lehman last year directed that the Naval Reserve was to build up to the Navy Manpower Mobilization System, NAMMOS, number by the end of fiscal year 1987, which is over 123,000 paid drill reservists.

In view of the recent renewed interest of the Congress in the Reserve components, combined with the present excellent recruiting climate, the Naval Reserve Association believes it appropriate to accelerate the Navy plan. Our proposal provides for a substantial increase in the more experienced personnel who can be of immediate benefit to the Naval Reserve Force as the new ships and aircraft enter the inventory.

We recommend that the Congress continue the increase in the Naval Selected Reserve strength toward the NAMMOS requirements by authorizing and funding an average paid drill strength of 105,000, versus the 99,000 the Navy has asked for, at a cost of $20.9 million over the budget submission.

We also believe strongly, as does the chief of Naval Reserve, that more funds are needed to support the paid annual training duty for category D naval reservists. These individuals drill without pay and seldom receive pay orders for annual training duty, even though they are in mobilization billets within the M plus 30-, 60- or 90-day increments.

We strongly urge the Congress to fund an increase of $2.5 million in the Reserve Personnel Navy account to provide for some additional annual training duty for these personnel.

## NAVAL RESERVE OPERATIONS AND MAINTENANCE

For the most part, the O&MNR account is supportive of the mission. The backlog of depot maintenance and ship overhaul was reduced considerably in the last several years through the efforts of the Congress, and for this we are very grateful.

There are shortages in some of the programs across the board, as stated in my prepared statement. A total additional $25 million would provide a realistic amount which could be used by the Chief of Naval Reserve to provide adequate training and improve the readiness of the units to a considerable degree.

Included in this request is $5 million for unfunded overhauls and restricted availability periods for NRF ships.

## OPERATIONS AND MAINTENANCE, NAVY

The most serious and potentially disastrous situation has to be the deteriorating number of flight hours allowed to be used by naval and Marine aviators, particularly in the TACAIR community. The average Navy TACAIR flight hours per month is 20 hours per month per crew in fiscal year 1984. The Navy goal is 25 hours per month. Marine TACAIR crews are not even flying enough per month to maintain combat efficiency.

A review of the program budget decision, PBD 005, shows that the Navy and Marine Corps tactical forces were cut a total of $65.9 million. The rationale that was used for cutting the flight hours was to lower the amount of cannibalization that was occurring in order to make the original flight hour program, when the real problem is the lack of spare parts or component repair.

The loss of even one aircraft and crew more than offsets the false economy represented by PBD 005. Whether recent multiple losses of the F-14's were related to the lack of flight hours is not known, but this is one area we should not gamble with—the lives of our aviators.

NRA strongly recommends that the committee, at a minimum, restore to the Navy/Marine flight hour program $52.6 million of the $65.9 million deleted by PBD 005.

## GUARD/RESERVE PROCUREMENT ACCOUNT

Mr. Chairman, last year we proposed that this committee recommend that separate Guard and Reserve procurement accounts be established. According to the Assistant Secretary of Defense Lawrence J. Korb, the shortage of equipment in the Guard and Reserve is approximately $17 billion. Establishment of G/R procurement accounts would help to focus attention on the corrective measures taken by the services to correct the shortages.

Louis J. Conti, Chairman, Reserve Forces Policy Board, concluded that: "In theory, the DOD Major Systems Acquisition Cycle, as currently designed, provides the mechanism for inclusion of Guard/Reserve equipment requirements. However, practice does not appear to track theory."

Dr. Edwad Philbin, Deputy Assistant Secretary of Defense, Reserve Affairs, stated during oral testimony, in response to questions, that he favored separate Guard and Reserve procurement accounts.

### RECOMMENDATION

The Naval Reserve Association again strongly recommends that this committee initiate action to permanently establish a separate procurement account for each of the Reserve components.

### NAVY AIRLIFT MODERNIZATION

The Navy proposal for replacing the old C-118 aircraft in the Naval Reserve envisions leasing up to 10 aircraft in fiscal year 1984. The budget for fiscal year 1984 airlift aircraft leasing contains $21.3 million, and the 5-year Defense plan, FYDP, shows $91 million to buy Navy airlift aircraft in fiscal year 1985.

NRA recommends that the Congress fund the procurement of 10 used commercial airlift aircraft in fiscal year 1984, at an additional cost of $56.7 million, using as an offset the $21.3 million O&MNR funds in the budget submission for airlift aircraft leasing, for a total cost including site support and initial spares of $78 million. This would save at least $34.3 million over the Navy plan.

The modernization/modification of naval maritime patrol aircraft. P-3A/B tactical modernization, TAC/NAVMOD. The TAC/NAVMOD gives the Reserve patrol aircraft a 75-percent improvement in ASW capability over the unmodified aircraft, at a cost of slightly more than $1.2 million per aircraft, a bargain in any budget. The package takes a basic P-3A/B aircraft and brings it up to a near baseline P-3C capability.

The Reserve P-3 squadrons will be among the first called in the event of increased international tension. They will deploy with the aircraft on hand. If those aircraft are not modified, they would be technologically incapable of challenging the Soviet submarine force. It would seem to make good sense to provide a first line of defense unit with the tools to do the job, particularly when the cure is available at such low cost.

The Naval Reserve Association recommends that the Congress add on $21.1 million APN funding to provide for an additional 17 TAC/MOD kits for Naval Reserve P-3A/B aircraft.

### RESERVE P-3C PROCUREMENT

There is the requirement for the Naval Reserve to provide 72 crews to the active VP units in a mobilization situation. Yet there is no appropriate hardware within the Naval Reserve inventory to conduct this training.

### RECOMMENDATION

The Naval Reserve Association recommends the procurement of an additional three P-3C update III aircraft each year for 3 years to enable the Naval Reserve to provide training for the fleet augmentation crews required on mobilization day—or even sooner in certain other circumstances.

The fly-away cost of the aircraft would be $31.1 million per aircraft in fiscal year 1984 dollars of $79.3 million each year for three planes. The mathematics of the buy is explained in my full testimony.

### RESERVE AIR WINGS

NRA proposes that the two Reserve air wings be designated and equipped as the carrier air wings for the 14th and 15th Battle Groups to be formed. The organization and personnel are in place, and upgrading of some of the aircraft types are already planned or in progress. The funding outlay for aircraft procurement could be reduced significantly and operating funds and personnel funds of all kinds would be considered less.

NRA proposes to commence the buy of A-6E's for the Naval Reserve in fiscal year 1984. The aim is to eventually build up to two squadrons, one in each Reserve air wing. The increased production rate would lower the fly-away cost of each aircraft from $23.9 to $19.5 million, an additional cost over budget of $154 million in fiscal year 1984.

### NAVAL RESERVE MISSIONS

The largest contingent of naval reservists in the shore establishment consists of the 17 Naval Reserve mobile construction battalions. These are highly qualified personnel, fully capable of performing any wartime task within their charter commensurate with the equipment on hand.

However, the 17 Reserve units are short $226 million in pre-positioned war reserve material, $134 million of which is in heavy equipment, like bulldozers and so forth. In this case, the capability of the personnel is offset by the lack of equipment.

We talked quite a bit in our prepared testimony about the future of expanded Naval Reserve roles, and in there we have got quite a few caveats before we get into into that situation of substituting the Naval Reserve—substituting active duty roles with naval reservists. Those are very important. We ought to pay very close attention to them before we start making the changes.

We do think there is a much cheaper and more efficient way of doing business by using the reservists. Some of the things that we talk about in the statement are the amphibious force. The Arapaho is an excellent area for more Reserve participation. We get into the Arapaho program, which would go into it quite deeply, and I think that is a terrific area for possible expansion of the Naval Reserve.

### HOSPITAL SHIPS

We have one hospital ship conversion in the budget for fiscal year 1984. This capability is sorely needed in the Navy. The NRA fully supports the inclusion in the budget and strongly recommends this committee's support in this regard.

### MINE WARFARE

Mine warfare is basically a Naval Reserve mission. We have heard rumors that the mine warfare ships may be on the chopping block again this year. We hope that is not true. We strongly recommend the committee's support of a planned modernization of the mine warfare fleet.

Mr. Chairman, "total force" and "one Navy" are terms which can finally be use to aptly describe the real world if the Congress will now take the lead in the effort to modernize and expand the Guard and Reserve. With reasonable planning and the execution of the plan, the Nation will realize increased security and the harassed taxpayer will benefit for many years to come.

Mr. Chairman, committee members, NRA sincerely appreciates your interest in providing this country with a Guard and Reserve capable of stepping into the breech when they are needed in a possible conflict. For the most part, the capability is there if the support is provided. When the Reserve components have been manned and equipped and when they have been called, they have performed admirably in combat and in combat support roles. The Naval Reserve and the other Reserve components will repay your efforts many times over in cost-effective, wartime-capable assets.

[The prepared statement of Captain Bell follows:]

# PREPARED STATEMENT
# CAPTAIN JOHN H. BELL
# U.S. NAVAL RESERVE (RET)
# LEGISLATIVE CONSULTANT
# TO THE
# NAVAL RESERVE ASSOCIATION

Mr. Chairman, Committee members, we are very appreciative of the opportunity to testify before this very important Committee again this year. You have been very understanding of Naval Reserve issues in the past and extremely helpful in solving many of the problems which have existed. We hope you will be as supportive of the Naval Reserve now and in the future.

The last two years we were concerned over the fact that the budgets by the New Administrative had practically no increase in the Guard and Reserve over the previous budget. The services as a whole were treated very well and a definite attempt was made to upgrade the active forces which had been neglected for so long. However, very little was done to build up the Guard and Reserve. Although the Naval Reserve funding has improved slightly, the constant dollar amount for the Reserve Components remained level this year.

The Naval Reserve Association is pleased with the strong bipartisan interest in the Guard and Reserve this year. We understand the strong desire in the Congress to find ways of cutting the defense budget without hurting the defense posture. This is a tall order, particularly in the short term, but we hope that it will lead to long term changes in the Reserve Component mission responsibility area. Intrinsic to the arguments for or against additional Reserve roles is the fact that words in support of the Guard and Reserve do not cost money while people, equipment and training do. The Guard and Reserve, properly supported, is the best defense buy available today.

We hope that if the Congress is serious about increasing the reliance on the Guard and Reserve that a statement of policy will be forthcoming from the Legislative and Executive branches. That statement should make it perfectly clear that many of the responsibilities being placed on the Reserve Components in their contributions to the national defense make them susceptible to being recalled for situations short of a national emergency. The President's authority to call up to 100,000 Selected Reservists for a maximum of 90 days should be cited. NRA believes that consideration should be given to increasing both the numbers of personnel and the length of service they can be called for by the President. Six to nine months would be a much more logical period for any kind of a deployment of forces. Only if the active forces can be assured that the Guard and Reserve personnel can be called upon in a tight situation, short of a full mobilization, will they consent to assigning important mission areas to their Reserve Components.

In response of the renewed interest of a number of Senators and Representatives in the Guard and Reserve contribution to our national defense effort and the request by several Committees to address the issue of expanded or new roles for the Naval Reserve, we have dedicated a considerable portion of this testimony to Naval Reserve missions, present and proposed. If the Congress is serious about expanding the Guard and Reserve roles, then the support must be provided. Too often in the past the missions have been assigned to a Reserve Component without the assets with which to accomplish the tasks inherent to the mission. When the support is provided, the Reserve and Guard unit, with the same equipment, can equal or outperform its active counterpart anytime.

The testimony today will include sections on:

- Naval Reserve Strength
- Pay for Category "D" Drillers
- Operations and Maintenance
- Separate Procurement Accounts For Guard/Reserve
- Navy Airlift Modernization
- The Modernization/Modification of the Reserve Maritime Patrol Air Community

- o Reserve Air Wing Modernization
- o Naval Reserve Missions - Current and Proposed

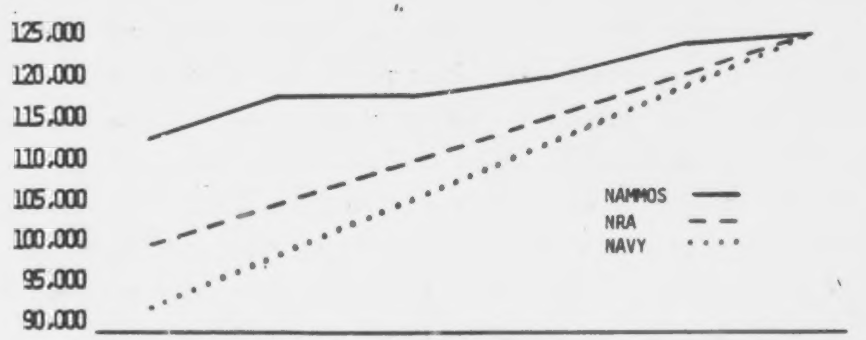
## Naval Reserve Strength

The history of the last decade shows that the Naval Reserve strength issue has been one of great controversy. It is only through the efforts of some very strong and forceful individuals on Capitol Hill that there is a Naval Reserve at all today. Secretary of the Navy, John Lehman, delivered the final impetus to a comeback of the Naval Reserve last year when he directed that the Naval Reserve was to build up to the Navy Manpower Mobilization System (NAMMOS) number by the end of Fiscal Year 1987. The Navy is now committed to reaching that goal which is 123,261 paid drill Reservists.

In view of the renewed interest of the Congress in the Reserve Components, combined with the present excellent recruiting climate, the Naval Reserve Association believes it appropriate to step up the plan to close in on the NAMMOS numbers. The NRA proposal recognizes that NAMMOS represents a wartime requirement and prudence dictates that as many as possible of those required to man the battle stations in a war should be trained, on board, and ready to go. It is in this context that NRA recommends additional numbers for the Naval Reserve for FY 1984 at a cost over budget submission of $20.9 Million. This increase would also cause a stepped up recruiting effort and thereby better prepare for any additional tasks/missions assigned to the Naval Reserve as a result of Congressional and Navy agreements.

The Naval Reserve Association proposal, which is to increase the Naval Reserve drilling strength to 105,000 in FY 1984, includes all of the planned Sea and Air Mariner program which will put new and long-term talent into the program. NRA also provides for a substantial increase in the more experienced personnel who can be of immediate benefit to the Naval Reserve Force as the new ships and aircraft enter the inventory. The recruiting climate is right at this time and we should take advantage of that situation. As the economy improves, which we certainly hope happens soon, the recruiting job will be more difficult, particularly for the middle grade experience levels. It should not be overlooked that the Naval Reserve could have been much stronger today if our forward vision had been better last year.

The following chart illustrates the three strength figures: NAMMOS, NAVY proposal and NRA proposal. The active duty support strength shown in parentheses at the bottom of the chart must be added to the NAVY and NRA totals.



| | FY 83 | FY 84 | FY 85 | FY 86 | FY 87 | FY 88 |
|---|---|---|---|---|---|---|
| NAMMOS* | 113,400 | 117,615 | 116,946 | 120,659 | 123,261 | 124,216 |
| NAVY* | 93,400 | 99,046 | 106,754 | 114,285 | 121,079 | 124,825 |
| NRA* | 100,750** | 105,000 | 112,250 | 119,500 | 121,079 | 124,825 |
| ACTIVE DUTY SUPPORT* | (11,710) | (12,942) | (14,196) | (14,909) | (15,671) | (16,425) |

* Figures are average strengths.
** Recommended by NRA in FY 1983 Budget Hearings.
(Note: OSD includes Active Duty support in Selected Reserve numbers. These figures shown above are in addition to the paid drill strengths shown.)
Appendix A to this testimony is a fact sheet concerning Naval Reserve Strengths which provides a quick look at the strength issue.

## Recommendation

That the Congress continue the increase in the Naval Selected Reserve strength toward the NAMMOS requirements by authorizing and funding an average paid drill strength of 105,000 (117,942 with Active Duty support) for FY 1984 at a cost of $20.9 Million over the budget submission.

## Volunteer Training Units/Category "D" Personnel

The Volunteer Training Units (VTU) are composed of highly qualified professionals who drill without pay and who, occasionally, perform two weeks annual Active Duty for Training with pay. Paid training duty has been very unpredictable in the past for these Reservists with funding provided for 0% to 75%, each year, of those eligible since FY 1973. The Naval Reserve Association believes strongly, as does the Chief of Naval Reserve, that more funds are needed to support this extremely valuable mobilization asset.

Other personnel in the same Category "D" predicament are also assigned to the Merchant Marine Program as well as a few from the Individual Ready Reserve (IRR) pool. The comments concerning the VTUs will also cover the Merchant Marine and IRR Category "D" drillers.

Unlike other Reserve Components, anyone in the Naval Reserve who has a mobilization recall later than M-day is NOT assigned as a Selected Reservist. Such an individual is placed in Category "D" or less. The Navy Category "D" personnel are in M+1, 2 or 3 mobilization increments and are required to train 48 drills a year and maintain a 90% drill attendance. The specialities included in these units include: Political Military Affairs, Intelligence, Military Sealift Command, Air Systems Command, Civil Defense, Supply, Medical, Public Affairs, etc. There is a tremendous pool of talent contained here for any mobilization situation. The units also supply replacements for normal attrition losses in Selected Reserve units.

The irony of this whole situation is that not only do these personnel not receive drill pay, as they would in most Reserve Components, but only about 25%-35% of the group now receive two weeks training duty each year. It is a fine example of dedication and patriotism, but however you look at it, it is UNFAIR.

The Naval Reserve Association believes that there should be increased funding for the Category "D" participants in the VTUs, and the Merchant Marine program and some of the IRR drilling programs with the goal of funding two weeks Active Duty for Training for all of these drillers. This should be able to be accomplished in two or three years.

Presently, there are $4.5 Million in the FY 1984 budget to fund approximately one-third of the program participants. A relatively small increase of $2.5 Million in the RPN fund for FY 1984 would fund 50% of those drilling in Category "D" and commence a movement toward full funding in the near future.

Recommendation

The Naval Reserve Association strongly urges the Congress to fund an increase of $2.5 Million in the Reserve Personnel Navy (RPN) account to provide

ANNUAL TRAINING DUTY FOR CATEGORY "D" PERSONNEL ASSIGNED TO MOBILIZATION BILLETS.

NAVAL RESERVE OPERATIONS AND MAINTENANCE

FOR THE MOST PART, THE O&MNR ACCOUNT IS SUPPORTIVE OF THE MISSION. THE BACKLOG OF DEPOT MAINTENANCE AND SHIP OVERHAUL WAS REDUCED CONSIDERABLY IN THE LAST SEVERAL YEARS THROUGH THE EFFORTS OF THE CONGRESS AND FOR THIS WE ARE VERY APPRECIATIVE.

THERE ARE SHORTAGES IN SOME OF THE PROGRAMS ACROSS THE BOARD IN SUCH PROGRAMS AS MOBILE DIVING/SALVAGE EQUIPMENT, SHIP INTERMEDIATE MAINTENANCE ACTIVITY (SIMA) REPAIR EQUIPMENT, C-9 SUPPORT, MCB EQUIPMENT/TRAINING, SPECIAL WARFARE (UDT/SEAL) EQUIPMENT, MOBILE MINE ASSEMBLY TRAINING, EXPLOSIVE ORDINANCE DEMOLITION HARDWARE, WEAPONS LOADING TEAM TRAINING, FLIGHT HOURS, BEACH GROUP TRAINING EQUIPMENT, ETC. A TOTAL ADDITIONAL AMOUNT OF $25.0 MILLION WOULD PROVIDE A REALISTIC AMOUNT WHICH COULD BE USED BY THE CHIEF OF NAVAL RESERVE TO PROVIDE ADEQUATE TRAINING AND IMPROVE THE READINESS OF THE UNITS TO A CONSIDERABLE DEGREE. NRA BELIEVES THAT DOLLAR FOR DOLLAR, THE BEST RETURN FOR MONEY SPENT IN DEFENSE IS THAT WHICH IS PUT INTO THE GUARD AND RESERVE ACCOUNTS. SINCE THE CONGRESS ESTABLISHED SEPARATE FUNDING IN THE O&M AND PERSONNEL, IT HAS MADE IT MORE DIFFICULT TO DIVERT THE FUNDS FOR ACTIVE FORCE USE. WE HOPE THIS SAFEGUARD WILL BE ESTABLISHED NEXT IN THE PROCUREMENT ACCOUNTS.

FLEET COMMANDERS HAVE ASKED FOR ADDITIONAL OPERATING FUNDS TO INCREASE THE STEAMING DAYS OF THE NRF SHIPS. NRA BELIEVES THAT 14 DAYS A QUARTER IS ADEQUATE FOR THE TRAINING OF THE RESERVE CREWS. ANY ADDITIONAL DAYS WOULD BE FOR FLEET COMMITMENT OVER AND ABOVE RESERVE TRAINING AND ANNUAL TRAINING PERIODS. THE FLEET ADD-ONS SHOULD NOT BE FUNDED UNDER O&MNR. HOWEVER, ADDITIONAL FUNDS FOR NRF SHIP MAINTENANCE ARE SUPPORTED. INCLUDED IN THIS REQUEST IS $5.0 MILLION FOR UNFUNDED OVERHAULS AND RESTRICTED AVAILABILITY PERIODS FOR NRF SHIPS.

OPERATIONS AND MAINTENANCE, NAVY

THE MOST SERIOUS AND POTENTIALLY DISASTROUS SITUATION HAS TO BE THE

DETERIORATING NUMBER OF FLIGHT HOURS ALLOWED TO BE USED BY NAVAL AND MARINE AVIATORS, PARTICULARLY IN THE TACAIR COMMUNITY.

TACTICAL AND ASW FLYING HOUR REQUIREMENTS ARE BASED ON A SYLLABUS OF EVENTS FOR AN AVERAGE AIRCREW TO ACHIEVE AND MAINTAIN AN ACCEPTABLE LEVEL OF PRIMARY MISSION READINESS (PMR). THE COMPLETE SYLLABUS CONSTITUTES 100% OF THE PMR. THE NAVY HAS ESTABLISHED AN ACCEPTABLE PEACETIME LEVEL OF READINESS AT 88% PMR OFFSET BY SOME SIMULATOR TIME TO 85% PMR AS A BUDGETED FLIGHT HOUR FIGURE. MARINE CORPS PMR RANGES FROM 75% TO 79% BUT HAS BEEN LOW IN THE LAST SEVERAL YEARS DUE TO MAINTENANCE PROBLEMS.

HISTORICALLY, THE PERCENT OF PMR HAS DECREASED IN THE NAVY FROM 85.5% IN 1981 TO A PROPOSED 79.4% IN FY 1984.

THE AVERAGE NAVY TACAIR FLIGHT HOURS/MONTH PROFILE TRENDS DOWNWARD FROM 23.5 HOURS/MONTH/CREW IN FY 1981 TO 20.0 HOURS/MONTH/CREW IN FY 1984. THE NAVY GOAL IS 25 HOURS/MONTH. MARINE TACAIR CREWS ARE NOT FLYING ENOUGH PER MONTH TO MAINTAIN COMBAT EFFICIENCY. THE AIR FORCE TACAIR, ON THE OTHER HAND, HAS FINALLY SEEN THE LIGHT AND IS TRENDING UP FROM 18 TO 20 HOURS/MONTH/CREW BETWEEN FY 1982 AND FY 1984. NAVY TACAIR FLIGHT CREWS OBVIOUSLY REQUIRE MORE STICK TIME THAN AIR FORCE AVIATORS BECAUSE OF THE CARRIER OPERATIONS ENVIRONMENT.

A REVIEW OF THE PROGRAM BUDGET DECISION (PBD) 005 SHOWS THAT THE NAVY/MARINE CORPS TACTICAL FORCES WERE CUT A TOTAL OF $65.9 MILLION. THIS INCLUDED A CUT OF 43,700 FLYING HOURS, $3.0 MILLION FROM THE S-3A FLIGHT PROGRAM AND $2.7 MILLION FROM THE E-2C FLIGHT PROGRAM, AS WELL AS $13.3 MILLION FOR OTHER CUTS WHICH WERE NOT RECLAMAD BY THE NAVY.

WHAT IS SO DISTURBING IS THAT THE RATIONALE THAT WAS USED FOR CUTTING THE FLIGHT HOURS WAS TO LOWER THE AMOUNT OF CANNIBALIZATION THAT WAS OCCURRING IN ORDER TO MAKE THE ORIGINAL FLIGHT HOUR PROGRAM. OBVIOUSLY, THE BUDGET ANALYST WAS NOT INTERESTED IN CORRECTING THE PROBLEM, WHICH WAS APPARENTLY THE LACK OF SPARE PARTS OR COMPONENT REPAIR.

Carrier based Navy and Marine aviation is inherently a critical occupation and is mercilessly unforgiving of human mistakes. The loss of even one aircraft and crew more than offsets the false economy represented by PBD 005. Whether recent multiple losses of the F-14s were related to the lack of flight hours is not known but this is an area we should not gamble with the lives of our aviators.

NRA strongly recommends that the Committee, at a minimum, restore to the NAVY/MARINE flight hour program $52.6 Million of the $65.9 Million deleted by PBD 005. An additional $40.0 Million (total add-on of $92.6 Million) would restore the Navy's original program and additionally bring the Navy/ Marine TACAIR flight crew hours/month up to near the FY 1981 level. We further recommend that you investigate the spare parts/component repair problem which PBD 005 addresses in NAVY/MARINE aviation and which is very detrimental to combat readiness.

Guard/Reserve Procurement Account

Mr. Chairman, last year we proposed that this Committee recommend that separate Guard and Reserve Procurement Accounts be established. Although that issue was not resolved, the add-on funding for Procurement of Guard and Reserve Equipment was placed in a Special Category outside the Service Procurement Accounts which was a step in the right direction.

Some Services in the past, particularly the Army, have claimed that a certain percentage of the Procurement Accounts were for Guard and Reserve Equipment. In actual practice, however, there was practically no new equipment placed in the Reserve Components and it was impossible to establish an audit trail of the funds supposedly earmarked for the G/R.

According to the Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics) Lawrence J. Korb, the shortage of equipment in the Guard and Reserve is approximately $17.0 Billion. Although the Congress added in $125.0 Million for G/R Equipment in the FY 1983 Defense Budget, it would take a long time to correct the shortage. Establishment of G/R Pro-

CUREMENT ACCOUNTS WOULD HELP TO FOCUS ATTENTION ON THE CORRECTIVE MEASURES TAKEN BY THE SERVICES TO CORRECT THE SHORTAGES.

WE REALIZE THAT THE DEFENSE COMPTROLLER AND THE SERVICES IN GENERAL ARE AGAINST SEPARATE PROCUREMENT ACCOUNTS. THE COMPTROLLERS DON'T WANT TO HAVE TO LOOK AT ANY MORE LINES IN THE BUDGET SUBMISSION THAN ABSOLUTELY NECESSARY AND THEY FALL BACK TO THE OLD ARGUMENT THAT THE BUY OUGHT TO BE FOR THE "TOTAL FORCE". IDEALLY SPEAKING, SO SHOULD THE OPERATIONS AND MAINTENANCE, PERSONNEL AND MILITARY CONSTRUCTION BUT THE MISMANAGEMENT OF THOSE ACCOUNTS WAS SO GROSS THAT THE CONGRESS MADE THE CHANGE TO SEPARATE ACCOUNTS IN AN EFFORT TO SALVAGE WHAT IT COULD FOR THE RESERVE COMPONENTS.

LOUIS J. CONTI, CHAIRMAN, RESERVE FORCES POLICY BOARD, IN HIS PREPARED TESTIMONY THIS YEAR, HAD PAGE AFTER PAGE DEDICATED TO THE HISTORY AND POLICY OF THE OFFICE OF THE SECRETARY OF DEFENSE (OSD) DATING BACK TO 1970 CONCERNING THE EQUIPPING OF THE GUARD AND RESERVE. AS CHAIRMAN CONTI CONCLUDED HOWEVER, "...IN THEORY, THE DOD MAJOR SYSTEMS ACQUISITION CYCLE, AS CURRENTLY DESIGNED, PROVIDES THE MECHANISM FOR INCLUSION OF GUARD/RESERVE EQUIPMENT REQUIREMENTS. HOWEVER, PRACTICE DOES NOT APPEAR TO TRACK THEORY..." DR. EDWARD PHILBIN, DEPUTY ASSISTANT SECRETARY OF DEFENSE (RESERVE AFFAIRS) STATED DURING ORAL TESTIMONY, IN RESPONSE TO QUESTIONS, THAT HE FAVORED SEPARATE GUARD AND RESERVE PROCUREMENT ACCOUNTS.

IT APPEARS THAT THE CONGRESS IS SERIOUS ABOUT RECTIFYING THE G/R EQUIPMENT SHORTAGES BUT THE ONLY WAY THAT MONEY APPROPRIATED WILL END UP FOR THE PURPOSE INTENDED IS TO ESTABLISH SEPARATE PROCUREMENT ACCOUNTS FOR EACH OF THE RESERVE COMPONENTS. THERE IS THE NATURAL RELUCTANCE OF THE SERVICES TO LOSE THEIR "FLEXIBILITY" IN MANAGING THE PROCUREMENT ACCOUNTS AS THERE WAS FOR O&M, PERSONNAL AND MILITARY CONSTRUCTION BEFORE THEY WERE CHANGED. THE CHANGE TO THE SEPARATE ACCOUNTS HAS HELPED CONSIDERABLY IN SQUELCHING THE PRACTICE OF DIVERTING RESERVE COMPONENT FUNDS TO THE ACTIVE FORCES.

## RECOMMENDATION

THE NAVAL RESERVE ASSOCIATION AGAIN STRONGLY RECOMMENDS THAT THIS

Committee initiate action to permanently establish a separate Procurement Account for each of the Reserve Components.

Navy Airlift Modernization

The replacement program, for the old C-118 Prop aircraft, which have been serving the Navy and the Naval Reserve for so many years, is in a critical stage at this time. All of the C-118s will be phased-out of the Naval Air Reserve in FY 1984. At long last it appears that everyone - NAVY, OSD and the Congress agree that the Navy needs a modest organic airlift capability. However, a faster method of getting there needs to be developed if we are to retain the required airlift capability and keep the experienced personnel available to support the replacement aircraft. The Navy proposal envisions leasing up to ten aircraft in FY 1984, depending on how many are procured with the $16.2 Million provided for in the FY 1983 budget. The goal is to have fifteen replacement aircraft on board for the 30 C-118s which will have completed phase-out by that time. The fifteen aircraft will consist of the 12 used DC-9s or other suitable aircraft to be located at NAS Whidbey Island, WA; NAS Memphis, TN; NAF Detroit, MI; NAS Glenview, IL; NAS Atlanta, GA; and NAS Willow Grove, PA. The plan further anticipates procuring up to twelve of the used aircraft with FY 1985 funds. The budget for FY 1984 airlift aircraft leasing contains $21.3 Million and the Five Year Defense Plan (FYDP) shows $91.0 Million to buy Navy Tactical Logistics Airlift aircraft in FY 1985.

The Naval Reserve Association strongly supports the Navy's intentions to meet its airlift requirements. There is, however, a growing feeling, based upon past history, that the out year intentions will never reach fruition. Support for this perceived "Reserve Issue" could prove very fragile during the next budget cycle happenings in the Pentagon. Consequently, the Naval Reserve Association advocates a stepped up procurement plan for used airlift aircraft which will save lease money and get the needed aircraft under Navy ownership a year early.

Both the Navy and NRA plans include the purchase of two aircraft with

THE FY 1983 FUNDS OF $16.2 MILLION MEANWHILE EXTENDING THE LEASE OF THE FOUR CORSAIR, INC. DC-9S PRESENTLY BASED AT NAS MEMPHIS, TN AND NAS WHIDBEY ISLAND, WA. THE LEASE WILL HAVE TO BE RENEWED BY 7 JUNE 1983 EVEN THOUGH IT DOES NOT EXPIRE UNTIL 19 AUGUST 1983. THE LEASED AIRCRAFT COULD BE PART OF THE GROUP OF TEN TO BE PROCURED SUBSEQUENT TO THE FY 1983 BUY. ALTHOUGH THE NAVY HAS NOT, TO DATE, BEEN AMENABLE TO BRINGING A DIFFERENT TYPE AIRCRAFT ON BOARD, A SHORTAGE OF SUITABLE DC-9S IN THE USED AIRCRAFT MARKET COULD CAUSE THE NAVY TO TAKE ANOTHER LOOK AT OTHER TYPE AIRCRAFT. THE OVERRIDING CONSIDERATION MUST BE TO SATISFY THE REQUIREMENTS AS EXPEDITIOUSLY AS POSSIBLE WITH AIRCRAFT WHICH MEET, AT LEAST, THE MINIMUM NEEDS. IT IS KNOWN THAT A VERY ATTRACTIVE PACKAGE OF BOEING 727 AIRCRAFT, ALONG WITH WORLD-WIDE MAINTENANCE AND PARTS SUPPORT OF THE AIRCRAFT, HAS BEEN OFFERED TO THE NAVY. WHILE THE OPERATING COST OF THE 727 IS GREATER THAN THAT OF THE DC-9 THE COST OF PROCUREMENT OF AN EQUAL OR GREATER OPERATING CAPABILITY IS CONSIDERABLY LESS. WHILE NRA DOES NOT ENDORSE ANY ONE PRODUCT OVER ANOTHER, ALL REASONABLE OPTIONS SHOULD BE GIVEN FULL CONSIDERATION.

THE NAVAL RESERVE ASSOCIATION PLAN WHICH FOLLOWS SAVES APPROXIMATELY $34.3 MILLION OVER THE NAVY PLAN AND SATISFIES THE REQUIREMENTS A YEAR EARLIER. MORE MONEY COULD CONCEIVABLY BE SAVED IN EITHER PLAN IF LEASE MONEY OR THE UNEXPIRED TERM OF AN AIRCRAFT LEASE COULD BE APPLIED TO THE PURCHASE PRICE. THE NRA PLAN WOULD ALSO COMPLETE THE SITING PLAN FOR THE AIRLIFT AT LEAST A YEAR EARLIER THAN THE NAVY SCHEDULE AND INSURE EQUITABLE AIRLIFT COVERAGE FOR RESERVE UNITS NATIONWIDE WITH THE RESULTANT IMPROVEMENT IN NAVAL RESERVE FORCE READINESS.

THE NAVY AND NRA PLANS FOLLOW: (SEE NEXT PAGE)

## BUY/LEASE DC-9s

(IN MILLIONS OF THEN YEAR DOLLARS)

### NAVY PLAN

| | FY 83 | FY 84 | FY 85 |
|---|---|---|---|
| NAVY OWNED | 17 | 19 | 19 |
| PROCUREMENT | 2 | 0 | 8-10 |
| LEASE | 4* | 6-8 | - |
| COST (APN) | 16.2** | - | 91.0** |
| LEASE COST | 14.5 | 21.3 | - |
| A/C ON BOARD | 23 | 25-27 | 27-29 |
| REQUIRED | 29 | 29 | 29 |
| SHORTFALL | (6) | (2-4) | (0-2) |

### NRA PLAN

| | FY 83 | FY 84 | FY 85 |
|---|---|---|---|
| NAVY OWNED | 17 | 19 | 29 |
| PROCUREMENT | 2 | 10 | 0 |
| LEASE | 4* | (4)* | - |
| COST (APN) | 16.2 | 78.0** | - |
| LEASE COST | 14.5 | - | - |
| A/C ON BOARD | 23 | 29 | 29 |
| REQUIRED | 29 | 29 | 29 |
| SHORTFALL | (6) | 0 | 0 |

*FOUR DC-9-30 ON LEASE FROM CORSAIR, INC. LEASE EXPIRES 19 AUGUST 1983 - LEASE RENEWAL IF DESIRED, REQUIRED BY 7 JUNE 1983. CHARTS CONSIDER THAT LEASE IS RENEWED AND THAT THEY ARE PURCHASED OR LEASED FOR FY 84.

**INCLUDES COSTS FOR SUPPORT FOR FOUR SITES, INITIAL SPARES AND NECESSARY MODS.

NOTE: ADD-ON COST TO APN ACCOUNT IN FY 84 WOULD BE OFFSET BY $21.3M IN O&MNR BUDGET - TOTAL BUDGET ADD ON $56.7 MILLION.

### RECOMMENDATION

THAT THE CONGRESS FUND THE PROCUREMENT OF 10 USED COMMERCIAL AIRLIFT AIRCRAFT IN FY 1984 AT AN ADDITIONAL COST OF $56.7 MILLION (USING AS AN OFFSET THE $21.3 MILLION O&MNR FUNDS IN THE BUDGET PROCESS SUBMISSION FOR AIRLIFT AIRCRAFT LEASING) FOR A TOTAL COST INCLUDING SITE SUPPORT AND INITIAL SPARES OF $78.0 MILLION. THIS WOULD SAVE AT LEAST $34.3 MILLION OVER THE NAVY PLAN.

## The Modernization/Modification of Naval Maritime Patrol Aircraft

### P-3A/B Tactical Navigation Modernization (TAC/NAVMOD)

We include this program for upgrading an older model aircraft and the Reserve P-3C Procurement proposal because of the great importance of these programs to the Seapower picture. Without these ASW forces a critical support for the Battle Groups and the Sea Lines of Communication is stretched too thin to be effective in the event of hostilities.

The TAC/NAVMOD program is a top priority one for the Naval Reserve. The 13 Reserve Maritime Patrol (VP) squadrons constitute 35% of the total Navy Maritime Patrol Aircraft (MPA) Force, over one third of the most effective counter weapon the nation possesses to combat the Soviet submarine threat.

The TAC/NAVMOD gives the Reserve Patrol aircraft a 75% improvement in ASW capability over the unmodified aircraft at a cost of slightly more than $1.2 Million per aircraft, a bargain in any budget. With the slow down in the Procurement of the P-3Cs, modification of the Reserve birds becomes even more essential.

Without quoting specific numbers, it is obvious that there are not enough VP squadrons, active and reserve, to support full wartime mobilization. It is just as obvious that with the cutback in P-3C Procurement that the Reserve P-3A/Bs will have to go through a Service Life Extension Program, an airframe extension waiver or start dropping out of the already inadequate force in the early 1990s. NRA believes the most efficient short term and cost effective answer to the situation would be to complete the modification of the Reserve aircraft as expeditiously as possible.

The Navy, through a program of upgrading and modernization, has been able to keep its Maritime Patrol Aircraft up to the state of art since 1945 when the P-2 Neptune was first introduced. It expects to continue to do so to the mid-1990s when the P-3 Orion is scheduled to be phased out.

The Tactical/Navigation Modernization package takes a basic P-3A/B aircraft and brings it up to a near baseline P-3C capability. The program adds tactical navigation computer, tactical display, Omega navigation and the vernier AQA-7 sensor. The localization performance and the ability of the modified aircraft to meet attack criteria and effectively deliver weapons are significantly improved.

The Reserve P-3 squadrons will be among the first called in the event of increased international tension. They will deploy with the aircraft on hand. If those aircraft are not modified they would be technologically incapable of challenging the Soviet Submarine Force. It would seem to make good sense to provide a first line of defense unit with the tools to do the job, particularly when the cure is available at such low cost.

The following chart provides the reader with the history of the TAC/NAVMOD program in relation to the 134 Reserve P-3A/B aircraft and the Naval Reserve Association's proposal to complete the modification program in Fiscal Years 1984 and 1985. The Navy has the capability to install 36 kits/year.

RESERVE P-3A/B TAC/NAVMOD

(Cost in $ Millions, FY-84 dollars)

| | FY 79 | FY 80 | FY 81 | FY 82 | FY 83 | FY 84 | FY 85 |
|---|---|---|---|---|---|---|---|
| Kits Procured | 14 | 0 | 34 | 15 | 12 | | |
| Procurement Required (NO) $ APN | | | | | | (36) 44.7 | 23 28.5 |
| Budget Request (NO) $ APN | | | | | | (19) 23.6 | |
| Proposed add-on (NO) $ APN | | | | | | (17) 21.1 | |
| Unmodified Aircraft | 120 | 120 | 86 | 71 | 59 | 23 | 0 |

Recommendation The Naval Reserve Association recommends that the Congress add-on $21.1 Million APN funding to provide for an additional 17 TAC/NAVMOD kits for Naval Reserve P-3A/B aircraft and direct Navy to complete the buy of 23 additional kits in FY 1985.

## Reserve P-3C Procurement

The P-3C, because of its continually improved capability due to regular updating with state of the art improvements, is the primary Anti-Submarine Warfare (ASW) weapons system in the inventory. It is obvious that, with the continued improvements in the Soviet Submarine technology, our weapons systems must be continually modified and upgraded to effectively counter the Soviet threat. Since the P-3C update III is the most modern Air ASW weapons system in existence it needs to be produced at whatever pace is necessary to meet this threat.

There is the requirement for the Naval Reserve to provide 72 crews to the active VP units in a mobilization situation, yet there is no appropriate hardware within the Naval Reserve inventory to conduct this training. While a small portion of the training can be conducted in the Reserve planes the remainder of the training cannot be provided. In the "come as you are" mobilization plans, there is no time or capability to train the augmenting crews after mobilization. Secretary of Defense, Casper Weinberger, promulgated a directive which, among other statements, said that, "...Active and Reserve units deploying at the same time should have equal claim on modern equipment inventories..." and that "...you (Service Secretaries) must ensure equipment compatability among Guard, Reserve and Active units which will serve in the battle-field together..."

NRA believes the logical way to solve the training problem expressed previously is to either supply the Naval Reserve with the P-3Cs with which to train and maintain the skills of the augmenting crews or to add three crews to each active duty squadron to bring them up to wartime complement. The second choice would be very expensive when compared with the Reserve alternative.

The plan -

- NRA proposes that: there be three training sites established with a Reserve detachment at each site;

The Congress provide three additional P-3C aircraft each year for three years to establish the nucleus for the training effort.

The plan would accomplish the following:

(1) Retain the currency of already trained fleet personnel. Personnel leaving fleet squadrons now have to go through retrogressive training down to the Reserve aircraft. Considerable monies could be saved by keeping such qualified personnel current and ready to return to an active squadron.

(2) Utilize common maintenance/supply support sites.

(3) Provide an additional pool of P-3C maintenance talent from among the TARs and Selected Reservists in the training unit. These personnel would also serve as the nucleus for the introduction of the P-3C into Naval Reserve Force Squadrons.

(4) Prepare the Reserve Community for the transition into an all P-3C force.

(5) Maintain a higher and therefore more economical production rate of the P-3C toward the goal of an all P-3C Maritime Patrol Aircraft Force.

The Reserve Plan envisions that the new aircraft would go directly to fleet squadrons with the Naval Reserve receiving P-3C aircraft from the fleet squadrons on a one for one basis.

Each Reserve P-3C Detachment would require an estimated seven (7) officers and ninety-three (93) Enlisted TARs per three plane site.

The three sites would probably be located at NAS Brunswick, ME; NAS Jacksonville, FL and NAS Moffett Field, CA.

## Recommendation

The Naval Reserve Association recommends the procurement of an additional three (3) P-3C Update III aircraft each year for three years to enable the Naval Reserve to provide training for the fleet augmentation crews required on mobilization day or sooner in certain other circumstances.

The flyaway cost of the aircraft would be $31.1 Million per aircraft in FY 1984 dollars or $79.3 Million each year for the three planes. The additional cost of $79.3 Million is based upon the fact that increasing the buy from five P-3Cs and two EP-3s would lower the flyaway costs of each aircraft from $33.1 Million to approximately $31.1 Million each. Also, the price of each aircraft would decrease approximately $2.0 Million/aircraft additionally if a multi-year contract was negotiated.

It is further recommended that: (1) the new UPDATE III aircraft be assigned to a fleet squadron on a one for one exchange ratio of fleet P-3Cs to the Naval Reserve P-3C augment training detachments. (2) an additional seven (7) TAR officer and 93 TAR Enlisted billets be authorized and funded over budget submission to administer the Reserve P-3C detachment.

## Reserve Air Wings

NRA proposes that the two Reserve Air Wings be designated and equipped as the Carrier Air Wings for the 14th and 15th Battle Groups to be formed. The organization and personnel is/are in place and upgrading of some of the aircraft types are already planned or in progress. What would be required would be to complete the modernization of the two Air Wings and assign them to two non-deploying Carriers equipped to support the assigned aircraft. The compatibility issue between the Reserve Air Wing and the Carrier is not as big a problem as it might at first appear if the aircraft are basically the same as those in an active wing.

The Reserve Air Wings have demonstrated regularly since 1976 that they could not only meet the challenge of such an assignment but could do it faster and with a higher professional capability than an active wing which

WAS NOT AT SEA OR IN A READY-FOR-DEPLOYMENT STATUS. THERE'S NO MYSTERY TO THE REASON FOR SUCH A STATEMENT, THE RESERVISTS ARE ALL SECOND OR THIRD TOUR PILOTS.

THE RESERVE UNITS WOULD MAINTAIN THEIR PRESENT AIR WING STRUCTURE BUT WOULD BE MODERNIZED WITH AIRCRAFT SIMILAR TO THE ACTIVE AIR WINGS. THE FUNDING OUTLAY FOR AIRCRAFT PROCUREMENT WOULD NOT BE REDUCED SIGNIFICANTLY ALTHOUGH SOME OF THE MODERN AIRCRAFT ARE ON BOARD OR SCHEDULED IN SOON. HOWEVER, OPERATING FUNDS AND PERSONNEL FUNDS OF ALL KINDS WOULD BE CONSIDERABLY LESS. THE RESERVE UNITS WOULD NOT BE ABLE TO DEPLOY FOR EXTENDED PERIODS, CONSEQUENTLY, THEY WOULD NECESSARILY BE ASSIGNED TO NONDEPLOYING CARRIERS. THE NON-DEPLOYING SHIP/S COULD BE IN OVERHAUL OR SLEP; BE USED AS A TRAINING CARRIER; OR BE IN A READY RESERVE STATUS. A HIGH LEVEL POLICY DECISION MIGHT HAVE TO BE MADE TO REDUCE THE CARRIER DEPLOYMENT REQUIREMENTS TO ACCOMODATE THE PROPOSAL TO UTILIZE THE RESERVE AIR WINGS. HOWEVER, THE CUTBACK IN OPERATING FUNDS WITHOUT LOSING WARTIME FIGHTING CAPABILITY COULD PROVIDE A LARGER TOTAL FORCE, IN THE EVENT OF HOSTILITIES, FOR THE SAME OR A LESSER AMOUNT OF MONEY.

THE SECNAV AND THE CNO PROPOSE TO START THE HORIZONTAL INTEGRATION OF CURRENT AIRCRAFT MODELS INTO THE NAVAL AIR RESERVE IN FY 1984. NRA PROPOSES THAT, IN ADDITION TO THE INTRODUCTION OF THE E-2C, F/A-18 AND THE LAMPS, ONE OF THE NAVAL RESERVE LIGHT ATTACK SQUADRONS COMMENCE TRANSITION TO THE A-6E, INTRUDER, A MEDIUM ATTACK AIRCRAFT. THIS PROPOSAL WOULD PROVIDE THE RESERVE AIR WING WITH A MEDIUM ATTACK, ALL-WEATHER, CAPABILITY IT DOES NOT POSSESS AT THIS TIME. IT WOULD ALSO HELP AMELIORATE THE UNSATISFACTORY SITUATION WHICH IS PRESENT IN THE A-7B RESERVE LIGHT ATTACK PROGRAM. A SIGNIFICANT NUMBER OF THE A-7BS HAVE LARGE GAPING HOLES WHERE THE ENGINES ARE SUPPOSED TO BE. FOREIGN MILITARY SALES DECISIONS HAVE AGGRAVATED THIS PROBLEM WHICH WILL NOT BE SOLVED, WITH REPLACEMENT ENGINES, FOR SEVERAL YEARS. THE SITUATION HAS GOTTEN SO BAD THAT UNDER THE PRESENT CIRCUMSTANCES THERE WILL BE NO A-7BS FLYABLE BY THE END OF FISCAL YEAR 1983.

NRA PROPOSES TO COMMENCE THE BUY OF A-6ES FOR THE NAVAL RESERVE IN FY 1984. THE AIM IS TO EVENTUALLY BUILD-UP TO TWO SQUADRONS, ONE IN EACH RESERVE AIR WING. THIS WILL REQUIRE TEN (10) A-6ES AND FOUR (4) KA-6S IN each squadron. The present two KA-3 Reserve squadrons could be disestablished once the KA-6s were on board.

The NRA proposal would require a procurement of an additional 24 A-6Es over the budget proposal during the next three year period, Fiscal Years 1984 through 1986. The plan proposes to equip each squadron with 8 A-6E aircraft during FY 1984 and FY 1985. The eight planes procured during Fy 1986 would bring each squadron to 10 aircraft (wartime complement) and provide a pipeline of four aircraft. The increased production rate would lower the flyaway cost of each aircraft from $23.9 Million to $19.5 Million. This way the active force gets a break on the price of the aircraft it needs and the nation fleets up its most economical and efficient weapon system (The Naval Reserve unit) to a much enhanced role in the defense posture. The (8) eight KA-6 Tankers required for the two Air Wings would come from those already being converted for which funding has been provided.

The following chart shows the current and proposed A-6E Procurement

(In Millions of Then Year Dollars)

| Fiscal Year | 84 | 85 | 86 |
|---|---|---|---|
| Proposed Plan* | (14) 352.4 | (14) 373.7 | (14) 395.6 |
| Current Plan* | (6) 216.4 | (6) 216.4 | (6) 212.4 |
| Additional Flyaway Cost | 136.0 | 157.3 | 183.2 |
| Spares** | 18.0 | 15.6 | 2.6 |
| Additional Total Cost | 154.0 | 172.9 | 185.8 |

* Includes intermediate and organized maintenance support gear.

** Includes $13.6 Million for spare engines and $3.0 for support equipment.

NOTE: Increased buy lowers unit flyaway cost from approximately $23.9 Million to $19.5 Million per A/C. Multi-year procurement would further lower costs by approximately 7%.

## Recommendation

The Naval Reserve Association recommends that the Congress authorize and fund a buy of eight (8) A-6E Intruders in each of fiscal years 1984-1986 at an additional cost over budget of $154.0 Million in FY 1984.

## Naval Reserve Missions

### Current Missions

The Naval Reserve already is charged with all or a majority of some Navy tasks or responsibilities. Included is the total responsibility for the CONUS based Logistics Airlift, the Light Attack Helicopter Mission, the Naval Combat SAR capability, the Naval Mobile Inshore Undersea Warfare (MIUW) and 99% of the Naval control of shipping. Over 80% of the Navy's assets in Ocean Minesweepers, Cargo Handling Battalions, and the Military Sealift Command and more than 60% of the Mobile Construction Battalions (MCBs), and Special Boat Forces are assigned to the Naval Reserve. Significant contributions to the Navy's total efforts in Maritime Patrol Air, Tactical Air Wings and Naval Intelligence are also in the Naval Reserve Forces. The total number of ships in the NRF has dwindled to only 35 in FY 1983 but should climb steadily in the out years.

The assignment of tasks and responsibilities to the Naval Reserve has been anything but planned in the past. More often than not, the transfer of assets and/or responsibilities from the active forces to the Naval Reserve was by default. The hardware was no longer needed by the actives or the priority of the mission did not qualify for active force funding. Sometimes the Congress directed transfer of assets such as in the case of the FF/FFGs. Presently, the Navy appears to be more aware of the possible advantages of Reserve asssumption of more responsibility and the upgrading of the hardware assigned. There are large deficits of equipment in many of the Naval Reserve programs, and some defense requirements readily apparent to us and to a potential enemy are not covered by anyone. A good example of this is the shallow water requirement which includes the protection of coastal and harbor areas of the U.S. and its territories. Naval Reserve units in this business include the Mobile Inshore Underseas Warfare (MIUW), Minesweeping Components and Coastal Defense Coordination Components. Since the disestablishment of the Sea Frontier Commands, the priority for the inshore defense of the nation has had little or no priority and existing units have very few assets with which to work. The responsibilities for the mission

AREAS HAVE NOT BEEN RESOLVED BETWEEN THE ARMY, NAVY AND THE COAST GUARD, ALTHOUGH A STUDY GROUP IS APPARENTLY LOOKING AT THE SITUATION. UNTIL THOSE BASIC DECISIONS ARE MADE IT IS DIFFICULT TO DETERMINE WHICH RESERVE COMPONENTS SHOULD BE TASKED WITH CERTAIN MISSION AREAS. IT IS RECOMMENDED THAT THE COMMITTEE INQUIRE INTO THE HARBOR/COASTAL DEFENSE MISSION AREA TO DETERMINE FOR ITSELF WHETHER OR NOT THE DEFENSE DEPARTMENT HAS ADDRESSED THE NATION'S REQUIREMENTS IN THIS AREA.

## SHORE ESTABLISHMENT

THE LARGEST CONTINGENT OF NAVAL RESERVISTS IN THE SHORE ESTABLISHMENT CONSISTS OF THE 17 NAVAL RESERVE MOBILE CONSTRUCTION BATTALIONS. THESE ARE HIGHLY QUALIFIED PERSONNEL FULLY CAPABLE OF PERFORMING ANY WARTIME TASK WITHIN THEIR CHARTER COMMENSURATE WITH THE EQUIPMENT ON HAND. THE REGULAR NAVY HAS EIGHT MCBS AND PLANS TO ESTABLISH TWO MORE IN THE NEXT TWO YEARS. NO DOUBT THE NEW BATTALIONS ARE NEEDED, BUT, IN THE MEANTIME, THE 17 RESERVE UNITS ARE SHORT $226.0 MILLION IN PREPOSITIONED WAR RESERVE MATERIAL, $134 MILLION OF WHICH IS IN HEAVY EQUIPMENT (BULLDOZERS, ETC.). IN THIS CASE, THE CAPABILITY OF THE PERSONNEL IS OFFSET BY THE LACK OF EQUIPMENT.

## FUTURE/EXPANDED NAVAL RESERVE ROLES

THIS PORTION OF THE TESTIMONY IS IN RESPONSE TO THE REQUEST TO PROVIDE THE ASSOCIATION'S VIEWS ON POSSIBLE NEW OR EXPANDED ROLES FOR THE NAVAL RESERVE.

BEFORE DISCUSSING SPECIFIC TASKS OR MISSIONS WHICH MIGHT BE PRACTICAL CANDIDATES FOR MORE NAVAL RESERVE PARTICIPATION, SEVERAL PRELIMINARY COMMENTS AND/OR ASSUMPTIONS NEED TO BE OFFERED.

- ANY SUBSTANTIAL ADDITION TO THE NAVAL RESERVE FORCE WILL HAVE TO BE PHASED IN, IN AN ORDERLY FASHION.

- SAVINGS IN THE DEFENSE BUDGET CANNOT OCCUR IMMEDIATLEY. THE PHASE-IN WOULD MEAN GRADUAL, BUT SIGNIFICANT, SAVINGS IN THE OUT YEARS.

- The Congress, the Administration, and the Navy Department would have to make hard decisions concerning ways of doing business in the Navy before many of the possible changes could be made, i.e., forward deployment practices, for one.

- The peacetime operations versus wartime capability has to be addressed before the full extent of Naval Reserve involvement can be determined.

- A New look and policy change would probably be necessary in basing the Reserve ships and aircraft. The hardware needs to be located as close as possible to the drilling population.

- Qualified Reservists in sufficient numbers to man the platforms assigned must be available and the Congress has to be ready to support the recruiting effort.

- Ship Deployments - A complete change in the method of deploying ships and personnel is suggested as a possible way to conserve funds and free up more ships for local operations or even transfer to the NRF. The idea is to deploy the necessary ships to the overseas area and leave them there between overhauls. Crews could be flown back and forth from CONUS to the ships in increments. It could be set up with sister ships, one overseas and one in CONUS, exchanging crews. Even commands could be interchangeable. This could free up one ship out of the three and still maintain overseas deployment.

The Naval Reserve Association offers the suggestions which follow, some specific and some general, for the Committee's consideration. Brief comments will be included with each item to help clarify each idea.

It is appropriate, we believe, at this time to quote from a speech Admiral Sir James Eberle, Royal Navy, Commander in Chief, Naval Home Command, gave at the U.S. Naval War College following conclusion of the

Falkland Islands affair. It normally makes good sense to learn from the experiences of others and it certainly costs a lot less to do so. Admiral Eberle stated that, "...While we have argued that long war is possible, we have not provided maritime forces well suited to protracted operations. We have too few ships, some of them inadequately armed, we have too few escorts suitable for protecting our merchant shipping, too few Long Range Maritime Patrol Aircraft, our front line and reserve war stocks are too low and our MCM forces do not match the potential threat..." Admiral Eberle was speaking of NATO forces not just those of Great Britain. Sir Eberle went on to point out that, "...In the 1979 U.S. Atlantic Council's Working Group on Securing the Seas, led by Paul Nitze and Leonard Sullivan, one of the principal recommendations (was) that 'all members...explore the potential of converting a portion of their commercial tankers, container ships and shipping Fleets to provide auxiliary escorts and sea-lane self-defense. At worst, such converted ships could reduce enemy submarine effectiveness; at best, they could contribute substantially to submarine losses.' Surely, when less than half of the cost of a modern warship goes to its weapon systems,..., and when containerized weapon system packages are a practical reality, it must make sense to exploit to the full war potential of our merchant ships. There can be no full substitute for warships - but they can be a most cost/effective and valuable back up to them..."

Later in this testimony NRA offers many suggestions of how the Naval Reserve can augment the active force. One of the suggestions concerns the development of the ARAPAHO concept which, we believe, provides a wealth of possibilities for wartime augmentation at minimal cost. Admiral Eberle expanded on the British experience in the Falklands with the following quote, "...The West then must try to...exploit...the advantage of its superior economic power in peace by turning it into military capability in war. The degree to which this is possible has been well demonstrated in the South Atlantic where no less than 50 merchant ships taken up from trade are being successfully used for military tasks as tankers, as troop transports, as vehicle transports, as our support ships, as MCMV and as repair tenders - to support a task force of about half this number of warships and Naval Auxiliaries deployed to the South Atlantic..."

## Destroyers/Frigates

There are 24 FF-1052 or FFG-7 ships which are in or slated to join the NRF in the next few years. So far the phase-in is proceeding according to the Navy's plan which is to complete the transfer by 1988 but behind schedule on the Congressionally directed input to the NRF which calls for completion by 1987.

An OSD analyst Franklin C. Spinney testified before several of the Armed Services, Appropriations and Budget Committees recently concerning Defense Planning. His presentation titled The Plans/Reality Mismatch contained the following quote concerning the FY 1983 budget:

"...The Navy is budgeting for six new ships this year. To afford them, it is mothballing 22 older ships, many of which were recently overhauled, because it must cut operating and maintenance costs. For the same reason, it is reducing the sailing time of its ships by 10% from 1982 to 1984. With a net loss of 16 ships, the Navy would appear to be sailing full speed astern in its effort to build a 600 ship fleet..." Without commenting on Mr. Spinney's statement NRA believes that we should take a close look at the possibility of taking 13 Destroyers out of a mothball status and putting them into a more ready status, with a cadre active crew of TARs and a full Reserve crew assigned to man them in a mobilization situation. Thirteen ships represent a lot of capability particularly when the nation is so short of assets for the vital wartime ASW Maritime Convoy Escort role.

## DD-931 Cadre Status

It is very possible that up to 13 of the 931 Class Destroyers would be candidates for a program which would retain an active duty (TAR) cadre of around 25% of the crew with the rest being Selected Reservists. We visualize that the ships be nested at one location in groups of four ships. These "nests" would be based near high population areas so that manning should not represent a problem. Three of the four ships would be in a "cold iron" status with some short term preservation or "Dry layup" in appropriate

AREAS WHILE THE FOURTH SHIP WOULD HAVE ITS POWERPLANT ON THE LINE FOR UNDERWAY TRAINING OF THE CREWS OF THE FOUR SHIPS. THE SHIPS WOULD BE ROTATED THROUGH THE "READY" STATUS WITH THE ACTIVE DUTY CREWS OF THE FOUR SHIPS FILLING IN WHERE NEEDED FOR UNDERWAY TRAINING PERIODS. THE CO OR XO OF EACH SHIP COULD BE A SELECTED RESERVIST AS WELL AS A SIGNIFICANT NUMBER OF THE OFFICERS ON BOARD. THE REDUCED MANNING CONCEPT IS NOT NEW. PRIOR TO THE KOREAN CONFLICT THE NRF CONSISTED OF DESTROYERS AND DESTROYER ESCORTS, SOME MANNED WITH A 35% ACTIVE DUTY AND OTHERS AT 65% ACTIVE. THE PRESENT NRF FF/FFGS ARE APPROXIMATELY 50/50 ACTIVE/RESERVE. FORTY OF THESE NRF SHIPS WERE ACTIVATED DURING THE BERLIN CALLUP IN 1962. SOME OF THE SHIPS WITH THE SMALLER ACTIVE DUTY COMPLEMENT OUTPERFORMED OTHERS RECALLED WITH THE LARGER ACTIVE CREW. THE RESULTS OF THE RECALL, WHICH WERE NOT CONCLUSIVE AS TO WHAT THE MIX SHOULD BE, PROBABLY ILLUSTRATED THAT THE KIND OF SUPERVISION AND INTEREST EXERCISED OVER THE INDIVIDUAL SHIPS WERE THE IMPORTANT FACTORS IN HOW THEY PERFORMED WHEN ACTIVATED.

THE SHIPS WHICH APPEAR SUITABLE FOR CONSIDERATION ARE THE UNMODIFIED AND ASW CONFIGURED DD-931 CLASS SHIPS. THE OTHER FOUR WHICH WERE CONVERTED TO DDGS MAY NOT BE SUITABLE FOR SUCH A PROGRAM.

NRA STRONGLY RECOMMENDS THAT A CLOSE OBJECTIVE LOOK BE MADE OF OUR PROPOSAL BY THE CONGRESS AND THE NAVY AS A WAY TO IMPROVE OUR WARFIGHTING POTENTIAL.

## THE AMPHIBIOUS FORCE

THE AMPHIBIOUS SHIPS WOULD SEEM TO PRESENT AN EXCELLENT AREA FOR MORE RESERVE PARTICIPATION. THIS HAS NOT WORKED OUT IN PRACTICE THOUGH DUE TO THREE BASIC FACTORS: (1) THE ALLOWANCE FOR SELECTED RESERVISTS CONSISTED MAINLY OF LOW OR NON-RATED PERSONNEL. CONSEQUENTLY, THE RESERVE MANNING WAS LOW BECAUSE OF THE SCARCITY OF NON-RATED PERSONNEL IN THE NAVAL RESERVE, (2) THE RESERVE AMPHIBIOUS AND SUPPORT SHIPS, THE AES AND LKAS, WERE BASED AT PORTS WHICH WERE ALREADY SATURATED WITH RESERVE SHIPS AND WHERE THE DRILLING POPULATION WAS INADEQUATE TO SUPPORT THE MANNING REQUIREMENTS, AND (3) THE MARINE CORPS DID NOT WANT THEIR AMPHIBIOUS SHIPS TIED UP IN THE RESERVE.

THE BIG PROBLEM WAS PROBABLY A LACK OF UNDERSTANDING BY THE MARINES OF THE NRF CONCEPT.

THERE ARE TWO LSTS IN THE NAVAL RESERVE AT THIS TIME. THE NAVY HAS INCURRED THE DISPLEASURE OF CHAIRMAN ADDABBO OF THE HAC DEFENSE SUBCOMMITTEE CONCERNING THE SCHEDULING OF THE USS BOULDER (LST) HOMEPORTED IN NEW YORK. APPARENTLY, ACCORDING TO MR. ADDABBO'S LETTER, THE SHIP IS NOT IN HOMEPORT LONG ENOUGH TO TRAIN ITS RESERVE CREW ON DRILL WEEKENDS. THIS COMPLAINT WAS REGISTERED AFTER SEVERAL YEARS OF CONTINUED ASSURANCES BY THE NAVY THAT NRF SHIPS WOULD BE USED FOR TRAINING OF THE RESERVE CREW AND THAT FLEET COMMITMENTS WOULD NOT INTERFERE WITH THAT TRAINING.

IN ANY EVENT, ALL OF THE LSTS NOT NEEDED FOR NORMAL DEPLOYMENTS COULD BE PUT IN THE NRF. THEY COULD BE AVAILABLE FOR EMPLOYMENT BY THE MARINES WHEN NEEDED. THE LST IS AN IDEAL SHIP FOR THE NAVAL RESERVE. IT IS RELATIVELY EASY TO SUPPORT, IS COMPATIBLE WITH MOST PORTS OR ANCHORAGES AND PROVIDES AN EXCELLENT TRAINING PLATFORM.

THE POSSIBILITY OF PUTTING AN AMPHIBIOUS SQUADRON, EXCEPT FOR THE LPH, INTO THE NAVAL RESERVE SHOULD BE EXPLORED. THIS AMPHIBIOUS READY GROUP COULD FUNCTION AS AN ORGANIZED SQUADRON. TRAINING DUTY COULD BE COORDINATED WITH THE MARINES SO THAT EXERCISES WOULD BE PLANNED AT A MUTUALLY COMPATIBLE TIME.

## ARAPAHO

WE HAVE INCLUDED THIS CONCEPT AS ONE OF OUR MAIN ISSUES FOR DISCUSSION BECAUSE OF ITS TREMENDOUS POTENTIAL, AN ALMOST UNLIMITED NUMBER OF POSSIBLE ROLES IN WARTIME, ITS FLEXIBILITY TO BE CONVERTED QUICKLY TO OTHER CONFIGURATIONS, THE AVAILABILITY OF HULLS ALREADY IN EXISTENCE TO ACCOMODATE ARAPAHO, AND, FINALLY, THE COST ADVANTAGES OF THE SYSTEM. WE QUOTED EARLIER IN THIS TESTIMONY FROM A SPEECH BY ADMIRAL SIR JAMES EBERLE, ROYAL NAVY. WE BELIEVE HIS REMARKS SHOULD BE CONSIDERED VERY CAREFULLY BY NAVY AND CONGRESSIONAL PLANNERS.

THE NAVY'S ARAPAHO SYSTEM IS A SUCCESS IN EVERY MEASURABLE WAY EXCEPT

IN NAVY'S ACCEPTANCE OF THE CONCEPT. THE PROTOTYPE - INCOMPLETE AND ONLY PARTIALLY OUTFITTED THOUGH IT IS - WAS SUCCESSFULLY DEMONSTRATED IN BOTH SHORE AND UNDERWAY SEA TRIALS IN CHESAPEAKE BAY AND HAMPTON ROADS IN 1982. SOME 280 HELICOPTER LANDINGS AND TAKEOFFS HAVE BEEN MADE ON THE FACILITY TO DATE, 178 OF THEM AT SEA. NAVY, MARINE CORPS AND NATO FLIGHT CREWS HAVE ACTUALLY MADE DAY AND NIGHT LANDINGS AND ARE ENTHUSIASTIC ABOUT ITS POTENTIAL. THE MARITIME INDUSTRY -- OWNERS, OPERATORS, UNIONS -- VIEWS THE ARAPAHO CONCEPT AS A PRACTICAL, NEAR-TERM MEANS OF INJECTING NEW VITALITY INTO OUR DEPRESSED ECONOMY AND PROVIDING A VITAL DEFENSE SERVICE THROUGH USE OF COMMERCIAL CARGO SHIPS IN NAVAL MISSIONS.

IT IS IMPORTANT, THAT OUR MERCHANT MARINE BE GIVEN AN OPPORTUNITY TO DEMONSTRATE ITS PRACTICALITY AND EFFECTIVENESS IN WARTIME MISSIONS. WITH ARAPAHO SYSTEMS AVAILABLE, LITERALLY HUNDREDS OF CARGO SHIPS COULD BECOME AUXILIARY AVIATION SHIPS IN EMERGENCIES, SUPPORTING ANTI-SUBMARINE, AMPHIBIOUS, MINE WARFARE AND OTHER IMPORTANT MARITIME FUNCTIONS OF THE FLEET. AS DISCUSSED LATER, MANY OTHER VARIATIONS ARE POSSIBLE FOR OTHER THAN AVIATION MISSIONS. THIS COULD BE DONE AT A FRACTION OF THE EXPECTED COST, THROUGH USE OF EXISTING HULLS AND EXISTING CIVILIAN OPERATING PERSONNEL. MILITARY AIRCRAFT COULD BE DRAWN FROM NAVY AND MARINE CORPS RESERVE UNITS. IT IS CONCEIVABLE THAT THE ARMY, COAST GUARD AND EVEN THE AIR FORCE MIGHT PROFIT FROM ACCESS TO THESE FULLY-EQUIPPED, MERCHANT SHIPS, AND FIND IT POSSIBLE TO FULFILL MISSION REQUIREMENTS AT AN APPRECIABLE SAVING IN MONEY AND MOBILIZATION TIME. WE BELIEVE THESE GOALS ARE WORTH PURSUING, ESPECIALLY IN THE FACE OF SUCCESSFUL ARAPAHO SEA TRIALS. THE NECESSARY FUNDING SUPPORT SHOULD BE PROVIDED BY THE CONGRESS AND A PLAN OF ACTION BE DEVELOPED THAT WILL EXPAND CURRENT TESTING INTO MANY OTHER POSSIBLE FLEET TACTICAL AND SUPPORT ADAPTATIONS OF THE ARAPAHO CONCEPT. WE BELIEVE SINCERELY THAT THE NAVY SHOULD LOOK VERY CLOSELY AT VIABLE AND EFFICIENT WAYS TO USE OUR MERCHANT MARINE PARTICULARLY FOR WARTIME ORIENTED TASKS.

THERE IS THE POSSIBILITY THAT THE ARAPAHO PROTOTYPE MIGHT BE LOANED OR SOLD OVERSEAS. TO THE EXTENT THAT THIS USAGE SUPPORTS ADVANCED TACTICAL AND OPERATIONAL TESTING, IT SHOULD HAVE COMMITTEE SUPPORT. HOWEVER, IT IS essential that with or without the prototype hardware, a serious, funded ARAPAHO program be resumed and sustained. It seems proper to consider the manufacture of an optimized version of the first prototype dictated by shore and sea tests of 1982.

The proposed new ARAPAHO should embody certain minimum features: full berthing and support for a complete military detachment; outfitted shops and aivation support equipment; adequate aviation fuel supplies; installed data processing equipment adequate for independent command, control and communications for at least, the convoy protection and sealane defense missions; provision for the "Harrier" fighter-bomber, now in regular Marine Corps service, as well as all operational Navy and Marine Corps helicopters.

The strongest support is given for ARAPAHO acceptance as a regular, functioning system of the Naval Reserve and possibly the Marine Reserve. It is visualized that upon wartime mobilization, certain designated and trained Reserve components would report to activated merchant ships and with their aircraft, logistics support and ARAPAHO facilities, convert these vessels to auxiliary aviation support platforms. This would require an expansion of the Reserve program and we request that the committee be prepared to accommodate the resource commitment this could imply.

There are many possibilities of filling in the holes in our national defense posture, which occur because of being below the budget cut line, by adaptations of the ARAPAHO concept. Just by changing the configuration of the modules to put aboard an available hull a whole plethora of tasks can be accomplished in addition to the ASW Maritime Convoy Escort Mission. They include: (1) Surface minesweeping including helicopter minesweeping; (2) Towed-array sonars; (3) ASW helicopter support for Carrier Battle Groups, (allowing additional fixed wing aircraft aboard the Carrier); (4) Command/Control functions for AMPHIBIOUS operations; (5) Helicopter or Harrier platforms for AMPHIBIOUS operations; (6) Hospital or Casualty evacuation base; (7) Vertical On Board Delivery (VOD) support for a Task Group, (amphibious or otherwise); (8) Refueling, Replenishment and other Support functions; and (9) possibly hundreds of other tasks limited only by the imagination and ingenuity of the planners. Back in the late 1970s the

Congressional Budget Office (CBO) stated that as a result of its 1979 study, there was a shortage of anywhere from 59 to 273 Escort type ships in the Atlantic alone depending upon which scenario is used. There has been a decrease of escort type vessels since that time which would seem to call for some kind of solution if we are to be serious about planning to win a conventional war. NRA believes that we have an opportunity to address many of our defense shortages at sea with ARAPAHO or a modification thereof.

An avenue of growth still unexplored, is the concept of providing in "kit" form, all the major "mission components" of the classic escort-type ship to the ARAPAHO-equipped merchantmen. Various types of radar can be adapted from existing designs and quickly made compatible with ARAPAHO; towed-array sensor systems now in use aboard destroyers and frigates can clearly be "modularized" and added to the ARAPAHO "kit"; modern point-defense weapons can be adapted to the modular concept and distributed for emergency installation aboard cargo ships, further protecting the ARAPAHO facility; chaff launchers and other protective devices are equally adaptable. We could even consider basing ballistic or cruise missiles aboard. By taking advantage of these opportunities, we can accept a sizeable portion of the sealane defense burden within the combined resources of the Naval Reserve and Merchant Marine, freeing critical commissioned naval forces for power projection and strike warfare elsewhere. Because of its mobility, ARAPAHO can be dismantled and its ingredients redistributed within the commissioned Navy whenever that action is required. That would be a physical impossibility with any other comparable type of combatant.

Defending vital elements of our new rapid deployment force poses significant obstacles to our already over-extended naval battle groups. Satisfactory defenses just cannot be provided should an adversary elect to challenge us on multiple fronts simultaneously. One means of addressing this hazard is to embody the ARAPAHO principle in RDJTF planning and accept it as a fundamental element.

Serious concern exists toward the submarine-launched torpedo and anti-shipping missile and their threat to our sealanes. Equally serious, we

FEEL, IS THE POTENTIAL THREAT TO NATO HARBORS, ANCHORAGES AND GEOGRAPHICAL "CHOKE POINTS" FROM A MASSIVE MINING EFFORT BY SUBMARINES, SURFACE SHIPS AND AIRCRAFT. WARSAW PACT MEMBERS HAVE A LONG HISTORY OF INTEREST AND EXPERIENCE WITH MINE WARFARE; THEIR SHIPS HAVE HAD THIS CAPABILITY FOR DECADES. WITH OUR CARRIER BATTLE GROUPS LARGELY COMMITTED TO STRIKE WARFARE AND POWER PROJECTION, AND OUR LHA/LPH/LPD-TYPE UNITS DEDICATED LARGELY TO AMPHIBIOUS WARFARE AND GROUND FORCE PROJECTION, THERE IS LITTLE PRACTICAL OPPORTUNITY FOR THE NAVY'S AIRBORNE MINE WARFARE FORCES TO EXERCISE AT SEA IN EITHER AN OFFENSIVE OR DEFENSIVE ROLE. THE AVAILABLE HULLS JUST DO NOT EXIST, NOR ARE THEY PLANNED. MINE DEFENSE HAS BECOME SOMETHING OF A LOST ART EXCEPT FOR THOSE RELATIVELY SMALL, SCATTERED UNITS THAT BRAVELY ATTEMPT TO VIE FOR SEA TIME AND BLUE-WATER EXPERIENCE. THE MERCHANT MARINE MIGHT WELL BE THE SOLUTION TO THIS ISSUE, SINCE AN ARAPAHO-EQUIPPED CARGO SHIP CAN JUST AS EASILY ACCOMODATE THE CH/MH-53 AS THE SH-3 AND SH-2. MANNED BY DESIGNATED NAVAL RESERVE FORCES, ARAPAHO MIGHT PLACE MINE WARFARE IN A COMPLETELY DIFFERENT PERSPECTIVE, AND AT PRACTICALLY NO ADDED COST. THIS POSSIBILITY TYPIFIES THE CONFIDENCE OF THIS COMMITTEE IN ADVANCED CONCEPTS THAT ARE PRACTICAL AND WORKABLE AND ABOVE ALL, TESTED AT SEA AND FOUND TO BE FEASIBLE, AS THE SECRETARY OF THE NAVY RECENTLY TESTIFIED WITH REGARD TO ARAPAHO. WE JUST DO NOT BELIEVE ALL POSSIBILITIES HAVE BEEN ADDRESSED OR HAVE BEEN/ARE BEING EXPLORED, FOR A VARIETY OF REASONS WE THINK WE SHOULD EXPLORE ALL REASONABLE POSSIBILITIES WHILE THERE IS STILL TIME.

WE OFTEN HEAR THAT ARAPAHO POSES A THREAT TO THE AIRCRAFT CARRIER. WE CANNOT BELIEVE THAT RESPONSIBLE OFFICIALS HARBOR CONCERNS THAT MERCHANT SHIPS CAN EVER SUPPLANT MAJOR FLEET COMBATANTS. THE RELATIVE WARFARE POTENTIAL OF EACH IS ENTIRELY DIFFERENT AND CANNOT BE COMPARED IN THAT CONTEXT. ARAPAHO IS COMPLEMENTARY, OR SUPPLEMENTARY IF YOU WILL TO THE PRESENT COMBAT AND COMBAT SUPPORT SHIPS. THE CRITICAL ISSUE IS THAT WE NEED BOTH TO SUCCESSFULLY PROTECT OUR NATIONAL INTEREST AND ADEQUATELY INSURE OUR ASSETS. ONE WITHOUT THE OTHER LEAVES AN UNNECESSARY GAP IN THE TACTICAL STRUCTURE AND THIS IS EVIDENT...OR SHOULD BE.

THIS COMMITTEE ADDRESSES THE OVERALL DEFENSE RESPONSIBILITIES OF THE NAVY AND PROVIDES GUIDANCE AND DIRECTION WHERE APPARENT ECONOMIES CAN BE introduced. We ask the committee to look at why Reserve resources have been so consistently neglected and under-utilized. To fail to fully apply the strengths of the Reserve in the wake of recent official testimony about budget and force shortfalls in the operating forces, is, we believe, inconsistent with the commitment to provide for the common defense.

The Navy must have, and deserves, encouragement and support in its efforts to provide a three-ocean defense with a 1-1/2 ocean budget (as a senior official put it). We have to develop and refine means to wage war at sea, defend our interests, sustain our treaty obligations and provide visible evidence of our naval prowess at less overall cost than is the case today. This is mandatory, and if we are not successful, we just may find other forms of military power and capability applied to traditional Navy missions -- again, due solely to our inability to meet the price. We really have no practical choice but to develop lower-cost maritime weapons systems.

## Hospital Ships

One Hospital Ship conversion is included in the budget for FY 1984. The capability is sorely needed in the Navy and NRA fully supports its inclusion in the budget and strongly recommends this committee's support in this regard.

A considerable number of Medical Personnel will obviously be needed to man the ship. The active duty portion of the crew would compose the peacetime crew requirements including a basic medical staff. The remainder of the crew, medical and line, could be Selected Reservists. A gradual buildup of the Reserve Medical staff should commence as far as possible ahead of the completion of the ship's conversion since a significant buildup of Medical Personnel is already scheduled in the Naval Reserve over the next few years. Peacetime deployment plans will obviously dictate how much of the crew and staff can be inactive reservists. The active duty personnel would be composed of TARs and/or USN personnel and would be assigned to fill the remainder of the billets.

## Mine Warfare

The surface mine warfare mission is basically a Naval Reserve mission with 86% of the Ocean Minesweepers being in the NRF. Even more promising is the scheduled transfer of the new MCMs and MSHs into the NRF after a 12 to 18 month shakedown in the active force. The transfer to the Naval Reserve disappears occasionally from the FYDP but at the present time it is on the schedule. The other half of the mission is missing, the aerial minesweeping. Back around the 1973/74 time frame the Helicopter Minesweeping mission was scheduled to be transferred to the Naval Air Reserve along with the assets. Just prior to the transfer, however, the Navy experienced a critical shortage of Carrier on board Delivery (COD) and Vertical on board Delivery (VOD) aircraft. As a result, Navy requested and received permission from OSD to cancel the transfer of the Minesweeping Helicopters to the Naval Reserve and use the aircraft (sans minesweeping gear) for the VOD mission. Now that some nine or ten years has elapsed since that crisis it would seem feasible to complete the long delayed transfer of the Minesweeping Helos to the NRF. As visualized by NRA the only USN aerial or surface minesweeping assets would be in Test and Evaluation.

We hear rumors that the Mine Warfare ships may be on the chopping block again this year. This country has already gambled that we will not need a Mine Sweeping capability in the near future by delaying the procurement of ships for that purpose. With the demonstrated capability and expertise of the Soviets in mining operations, it borders on self destruction to ignore the threat to our fleet in wartime. The Soviet Union possesses the largest mine stockpile in the world and the largest force to deliver the mines. This would not be an idle threat to our Navy in the event hostilities broke out between the two powers. Rear Admiral C.F. Horne III, the Commander, Mine Warfare Command stated the case very well, "...Mines may be weapons that wait, but mine warfare will wait no more..." At the present time there are three active fleet and 18 NRF MSOs which will be phased out of commission during the next eight years as 14 new MCM and 17 new MSH ships are

SCHEDULED TO JOIN THE FLEET. THE EIGHTEEN NRF MSOs ARE EQUALLY DIVIDED BETWEEN THE ATLANTIC AND PACIFIC FLEETS WHILE ALL THREE OF THE ACTIVES ARE IN THE ATLANTIC. THE HOME PORTS ARE NEWPORT, RI; NORFOLK, VA; CHARLESTON, SC; MAYPORT, FL; PANAMA CITY, FL; SEATTLE/TACOMA, WA; SAN FRANCISCO, CA AND SAN DIEGO, CA. THE BASING PLAN FOR THE REPLACEMENT MCM/ MSHs WILL BE ALMOST THE SAME AS THE PRESENT ONE WITH PEARL HARBOR PICKING UP ONE MCM. THE RESERVE CREW NUMBERS WILL INCREASE FROM THE PRESENT 468 TO 653 IN APPROXIMATE NUMBERS.

IT IS OBVIOUS THAT THE NAVAL RESERVE FORCE, UNDER THE PRESENT PLAN, WILL BEAR CONSIDERABLE RESPONSIBILITIES FOR THE MINE DEFENSE OF THE UNITED STATES. NRA STRONGLY RECOMMENDS THAT THE COMMITTEE SUPPORT THE PLANNED MODERNIZATION OF THE MINE WARFARE FLEET.

## THE MERCHANT MARINE

SEVERAL YEARS AGO NRA PROPOSED A PLAN FOR SUPPLYING THE FLEET WITH FUEL, WORLD-WIDE IN PEACETIME OR IN WAR.

THE PROPOSED PLAN WAS TO BUILD ENOUGH OILERS FOR WORLD WIDE WARTIME SUPPORT. FOR THE SAKE OF DISCUSSION WE'LL USE THE NUMBER 16. EIGHT OF THE 16 ARE DETERMINED AS BEING NEEDED FOR PEACETIME SUPPORT, FOUR IN THE ATLANTIC AND FOUR IN THE PACIFIC. THE CREWS WOULD BE CIVILIAN MERCHANT MARINE PERSONNEL IN PEACETIME AND EACH SHIP WOULD HAVE A NAVAL RESERVE CREW ASSIGNED. THE MERCHANT MARINE CREWS WOULD ROTATE THROUGH ALL 16 SHIPS. THOSE NOT IN USE WOULD BE IN "LAY-UP" OR SHORT TERM PRESERVATION EXCEPT THAT ENOUGH OF THE SHIPS NOT ACTIVELY CONDUCTING REFUELING DUTIES WOULD REMAIN IN AN ACTIVE STATUS TO CONDUCT CREW TRAINING FOR THE NAVAL RESERVE CREWS.

NRA BELIEVES THAT SUCH A PROGRAM WOULD PROVIDE THE NECESSARY FLEET SUPPORT FOR THE MINIMUM COST AND STILL PROVIDE FOR POSSIBLE WARTIME REQUIREMENTS. SHOULD THE IDEA PROVE FEASIBLE, THE CONCEPT COULD BE EXPANDED TO INCLUDE MANY OF THE SUPPORT SHIPS I.E. SUPPLY, REFRIGERATION, AMMUNITION ETC. A PROGRAM SUCH AS THIS COULD CONCEIVABLY ALLOW A SIGNIFICANT NUMBER OF ADDITIONAL SHIPS TO BE BUILT AND MANNED FOR THE SAME OR LESS DOLLARS THAN PRESENTLY PLANNED.

Another possible alternative was included elsewhere in this testimony under the ARAPAHO program writeup.

Summary

The Naval Reserve Association fully supports the Secretary of the Navy and the Chief of Naval Operations in their efforts to achieve Maritime Superiority in the shortest possible time. This nation cannot afford to be second best in the control of the world's oceans, the air over them or the depths of them. Our Association is firmly committed to the Administration's effort to regain Naval Superiority, however, we do believe that significant, long term, savings can be made if more reliance is placed on the use of the Reserve.

We are very pleased that the Secretary of the Navy, John Lehman, has directed that certain initiatives be taken by the Navy with regard to the Naval Reserve in Total Force planning. Secretary Lehman has opted for the horizontal integration of weapons systems, specifically the F/A-18, into the Naval Reserve concurrently with active force Procurement. Actions such as this are going have to continue to be taken if the Naval Reserve is to live up to its full potential.

We have stated that our personnel are experienced and that most of their training would be refresher or, hopefully, upgrading to newer gear. Regretfully, much of the effort now has to go into retrogressive training backward to older equipment. Equipment is the key to mission readiness and you cannot find a more capable wartime asset than a Reservist trained on a modern weapon system. More and more people are beginning to realize that fact.

A recent Washington Post article by George C. Wilson talked about a group of former Government officials, headed by former Defense Secretary McNamara and former Secretary of State Vance who advocated cuts of $135 Billion from the proposed Defense Budget over the next five years. Joined by the former CNO Admiral Zumwalt and McGeorge Bundy, the group advocated

THAT MORE MONEY GO INTO THE NATIONAL GUARD AND RESERVE EQUIPMENT. THE NAVAL RESERVE ASSOCIATION AGREES WITH THE GROUP ON THAT ISSUE. WE BELIEVE THAT THERE MUST BE A DIFFERENT PERSPECTIVE THAT THESE INDIVIDUALS GET WHEN THEY MOVE AWAY FROM THE PENTAGON. THERE WAS NO EVIDENCE IN THE PAST THAT EITHER SECRETARY MCNAMARA OR ADMIRAL ZUMWALT EVER PLACED MORE THAN A PASSING THOUGHT TO THE GUARD AND RESERVE ISSUES. IT WOULD HAVE BEEN VERY APPROPRIATE TO LOOK TO THE RESERVE COMPONENTS DURING THE DAYS OF SECRETARY MCNAMARA'S "MORE BANG FOR THE BUCK" AND ADM ZUMWALT'S "HIGH/LOW MIX". WE ARE, HOWEVER, PLEASED TO WELCOME THEM ABOARD THE GUARD AND RESERVE EQUIPMENT ISSUE.

"TOTAL FORCE" AND "ONE NAVY" ARE TERMS WHICH CAN FINALLY BE USED TO APTLY DESCRIBE THE REAL WORLD IF THE CONGRESS WILL NOW TAKE THE LEAD IN THE EFFORT TO MODERNIZE THE GUARD AND RESERVE. WITH REASONABLE PLANNING AND THE EXECUTION OF THE PLAN, THE NATION WILL REALIZE INCREASED SECURITY AND THE HARASSED TAXPAYER WILL BENEFIT FOR MANY YEARS TO COME.

MR. CHAIRMAN, COMMITTEE MEMBERS, NRA SINCERELY APPRECIATES YOUR INTEREST IN PROVIDING THIS COUNTRY WITH A GUARD AND RESERVE CAPABLE OF STEPPING INTO THE BREECH WHEN THEY ARE NEEDED IN A (POSSIBLE) CONFLICT. FOR THE MOST PART, THE CAPABILITY IS THERE IF THE SUPPORT IS PROVIDED. WHEN THE RESERVE COMPONENTS HAVE BEEN MANNED AND EQUIPPED AND WHEN THEY HAVE BEEN CALLED, THEY HAVE PERFORMED ADMIRABLY IN COMBAT AND IN COMBAT SUPPORT ROLES. THE NAVAL RESERVE AND THE OTHER RESERVE COMPONENTS WILL REPAY YOUR EFFORTS MANY TIMES OVER IN COST EFFECTIVE WARTIME CAPABLE ASSETS.

MR. CHAIRMAN, NRA RESTS ITS CASE.

## FACTS - NAVAL RESERVE STRENGTH

1. THE ADMINISTRATION PROPOSES TO FUND 99,046 PAID DRILL NAVAL RESERVISTS IN FY 1984 (AVERAGE).

2. NAVAL RESERVE STRENGTH HAS BEEN A CONTROVERSIAL ISSUE SINCE EARLY 1970'S. ALL PARTIES, (OSD, NAVY AND CONGRESS), NOW AGREE ON REQUIREMENTS.

3. DECLINE OF NR STRENGTH WENT FROM 129,000 IN FY 1973 TO A LOW OF 87,000 IN FISCAL YEARS 1978 THROUGH 1981. CONGRESSIONAL ACTION STOPPED DECLINE AND INCREASED FUNDED STRENGTH TO 94,000 FOR FY 1982 AND FY 1983.

4. RECENT HISTORY OF SELECTED NR AVERAGE STRENGTH:

| FY | NAVY SUBMISSION | PRESIDENT'S BUDGET | CONGRESSIONAL AUTHORIZED | CONGRESSIONAL FUNDING |
|---|---|---|---|---|
| 73 | 129,000 | 129,000 | 129,000 | 129,000 |
| 74 | 129,000 | 116,981 | 119,231 | 116,857 |
| 75 | 112,819 | 107,526 | 117,000 | 108,485 |
| 76 | 95,142 | 93,982 | 106,000 | 99,000 |
| 7T | 92,000 | 92,000 | 106,000 | 101,400 |
| 77 | 92,762 | 52,000 | 96,500 | 96,500 |
| 78 | 96,500 | 52,000 | 87,000 | 87,000 |
| 79 | 87,000 | 51,400 | 87,000 | 87,000 |
| 80 | 87,000 | 48,700 | 87,000 | 87,000 |
| 81 | 87,000 | 87,000 | 87,000 | 92,000 (1) |
| 82 | 87,000 | 87,000 | 87,000 (2) | 94,000 |
| 83 | 94,000 | 94,000 | 94,000 | 94,000 |
| 84 | 99,046 | 99,046 | | |

(1) FUNDS DIVERTED BY OSD AND STRENGTH RETAINED AT 87,000.
(2) 90,000 STRENGTH RECOMMENDED BY HASC BUT DELETED IN AUTHORIZATION CONFERENCE.

5. THE FOLLOWING STUDIES DURING THE PAST DECADE ALL RECOMMENDED MUCH HIGHER STRENGTH THAN OSD ANALYSTS WOULD ACCEPT:

| STUDY | DATE | CONDUCTED BY | SELECTED RESERVE STRENGTH RECOMMENDED |
|---|---|---|---|
| TOTAL FORCE | 1973-74 | OSD | 92,000 |
| OP 605 | 1974-75 | NAVY | 102,000 |
| NAVY MISSION STUDY | 1976-77 | OSD | 95,900 |
| GUARD AND RESERVE (ROGAR II) | 1977-78 | OSD | 110,000* |
| NAVY MANPOWER MOBILIZATION SYSTEM (NAMMOS) | 1978 ONGOING | NAVY/OSD | 124,825** |

*RECOMMENDED 10% ADDITIONAL MANNING TO ENSURE FULL WARTIME AVAILABILITY.
**NAMMOS STATED REQUIREMENTS INCREASE FROM 113,406 IN FY 1983 TO 124,825 IN FY 1988.

APPENDIX A

6. OSD, IN FY 1981, DEFIED CONGRESS BY REFUSING TO USE APPROPRIATED FUNDS TO RAISE NR STRENGTH TO 92,000.

7. NR IS THE ONLY IMMEDIATE SOURCE OF TRAINED PERSONNEL TO AUGMENT THE ACTIVE NAVY IN THE EVENT OF WAR, NATIONAL EMERGENCY OR FOR OTHER CONTINGENCIES SUCH AS THE CALL UP OF 100,000 SELECTED RESERVISTS BY THE PRESIDENT.

8. Navy shortage of critical skills to man fleet ships could be at least partially offset by designating Naval Reservists to fill shortages.

9. Proposed expansion of Navy to 600 ships will increase need for additional Naval Selected Reservists to augment the new ships.

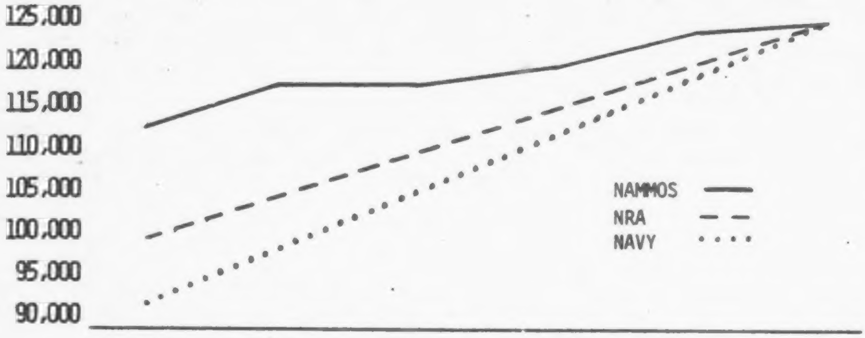
10. Naval Reservists have oversubscribed to the call to man the Battleships New Jersey and Iowa.

11. Recruiting climate favors accelerated climb toward NAMMOS numbers this year.

12. Maximum utilization of Reserve assets will provide expanded defense posture with top notch caliber personnel at lowest possible cost.

13. The planning criteria should be that: All mobilization missions not capable of being performed by the Naval Reserve should be in the active Navy.

14. The following graph illustrates NAMMOS, Navy and NRA proposals for increased NR strength:



| | FY 83 | FY 84 | FY 85 | FY 86 | FY 87 | FY 88 |
|---|---|---|---|---|---|---|
| NAMMOS* | 113,400 | 117,615 | 116,946 | 120,659 | 123,261 | 124,216 |
| NAVY* | 93,400 | 99,046 | 106,754 | 114,285 | 121,079 | 124,825 |
| NRA* | 100,750** | 105,000 | 112,250 | 119,500 | 121,079 | 124,825 |
| ACTIVE DUTY SUPPORT* | (11,710) | (12,942) | (14,196) | (14,909) | (15,671) | (16,425) |

* Figures are average strengths.
** Recommended by NRA in FY 1983 Budget Hearings.
(Note: OSD includes Active Duty support in Selected Reserve numbers. These figures shown above are in addition to the paid drill strengths shown.)

15. Recommendation:

That the Congress continue the increase in the Naval Selected Reserve strength toward the NAMMOS requirements by authorizing and funding an average paid drill strength of 105,000 (117,942 with Active Duty support) for FY 1984 at a cost of $20.9 Million over the budget submission.

## FACTS

## Tactical Navy Airlift Modernization

1. Airlift consolidation under MAC has been accomplished to the maximum by Navy. Air Force agrees that the remaining 10% is unique to the needs of the Navy and should be satisfied by Navy Organic Airlift.

2. Navy unique airlift needs are characterized by
   Short lead times,
   Low volume, and
   High frequency
   of demands to a multiplicity of unpredictable fleet locations for satisfaction of urgent requirements.

3. Congressional hearings and budget actions have resulted in support for Navy intra-theatre airlift modernization.

4. Defense Tactical Airlift Modernization (DODTAM) Study conducted by DOD in 1978 confirmed the need for 37 additional C-9Bs.

5. Immediate, responsive, wartime airlift to fleet commanders around the world is imperative. A modest Navy organic airlift capability has been clearly shown to be the only method of providing the requisite response. The airlift capability is utilized fully in peacetime to provide required readiness training and airlift for Fleet and Reserve support.

6. Procurement of used commercial airlift aircraft is the lowest cost option available to meet the remainder of the Navy's peacetime and wartime intra-theatre requirements.

7. The Navy's Organic Airlift is operated in CONUS by the Naval Reserve for the entire Navy.

8. Peacetime organic airlift is vital to the readiness of the Naval Reserve Force. Transportation to training platforms from drill sites is necessary for hands-on readiness training.

9. Quick responsive airlift for active and reserve Navy personnel shows personnel that Navy cares for their well-being, a very important recruiting/retention tool.

10. C-118 aircraft will be completely phased out of the Navy in FY 1984.

11. Replacement aircraft for the C-118s have not kept pace with the C-118 phase-out.

12. The Navy and Naval Reserve Assocation plans which follow provide two approaches to modernizing the Navy Airlift. The NRA plan provides the aircraft at least a year earlier than the USN plan, saves at least $34.3 Million over the next two years, but requires an additional $56.7 Million in FY 1984. The plans follow:

APPENDIX B

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### NAVY PLAN

(Cost in $ Millions Then Year FY 83 Dollars)

| | FY 83 | FY 84 | FY 85 |
|---|---|---|---|
| NAVY OWNED | 17 | 19 | 19 |
| PROCUREMENT | 2 | 0 | 8-10 |
| LEASE | 4* | 6-8 | - |
| COST (APN) | 16.2 | - | 91.0** |
| LEASE COST | 14.5 | 21.3 | - |

| | | | |
|---|---|---|---|
| A/C ON BOARD | 23 | 25-27 | 27-29 |
| REQUIRED | 29 | 29 | 29 |
| SHORTFALL | (6) | (2-4) | (0-2) |

### NRA PLAN

| | | FY 83 | FY 84 | FY 85 |
|---|---|---|---|---|
| NAVY | OWNED | 17 | 19 | 29 |
| | PROCUREMENT | 2 | 10 | 0 |
| | LEASE | 4* | (4)* | - |
| | COST APN | 16.2 | 78.0** | - |
| | LEASE COST | 14.5 | - | - |
| | A/C ON BOARD | 23 | 29 | 29 |
| | REQUIRED | 29 | 29 | 29 |
| | SHORTFALL | (6) | 0 | 0 |

*Four DC-9-30 on lease from Corsair, Inc. lease expires 19 August 1983 - lease renewal if desired, required by 7 June 1983. Charts consider that lease is renewed.

**Includes costs for support for four sites, initial spares and necessary mods.

NOTE: Add-on cost to APN account in FY 84 would be offset by $21.3M in O&MNR budget - total budget add on $56.7 Million. Savings of $34.3 Million could be realized in the FY 84-85 period by adopting the NRA plan.

## CAPTAIN JOHN H. BELL, USNR (RET)

Captain Bell is a life member and consultant to the Naval Reserve Association.

Born in Sioux Falls, South Dakota, May 5, 1924, he attended school there and at the University of Miami, Florida. He enlisted in the U.S. Navy as a Nav Cad in December 1942 and was commissioned an Ensign on April 15, 1944 as a Naval Aviator.

Captain Bell served in Fighter, Night Fighter, Special Weapons, Helicopter and Anti-Submarine Warfare Units. He commissioned and was the first Commanding Officer of Air Anti-Submarine Squadron Twenty Nine (VS-29).

He served on active duty for over 31 years, 22 of those years as a TAR officer. He was released from active duty twice and twice recalled for the Berlin crisis and Korea. CAPT Bell served as a Selected Reservist during his two years of inactive duty.

His last tours of active duty before retiring in January 1976 were as follows:

- o Officer in Charge - Reserve ASW Tactical School, Willow Grove, PA.
- o Commanding Officer - Naval Air Reserve Training Unit, Norfolk, VA.
- o Reserve Liaison Officer for Operations, Plans & Training, Commander Naval Air Forces Atlantic Fleet, Norfolk, VA.
- o Acting Director Reserve Plans Programs & Budget and as the Director Reserve Readiness & Mobilization, Office of the Deputy Assistant Secretary of Defense (Reserve Affairs).
  (Under the Honorable Ted Marrs and Will Hill Tankersley).

Captain Bell is married to former Margaret Mary Cogley of Sioux Falls, South Dakota. Captain and Mrs. Bell reside in their retirement home at Long Lane Farm located on the East River in Bohannon, Mathews County, Virginia.

### SUBCOMMITTEE SUPPORT FOR GUARD AND RESERVE UNITS

Senator RUDMAN. Thank you very much.

Let me just say to you that there was a substantial agreement with a good part of your testimony on this subcommittee. It is quite obvious to us that the proficiency of the Reserve units, the Guard units we have in this country is extraordinary. They perform their mission very well.

A number of us have had recent experience in inspecting some of those units. I have inspected a unit this past weekend. It happened to be an Air Guard unit, but they are very similar in what the units do.

I believe you will find on this subcommittee substantial sympathy to changing some of the numbers that have been submitted to us. There is no question that from a cost-effectiveness point of view we get more than a dollar's worth from a dollar spent with our Guard and Reserve units. I believe that, with the enormous pressure on the defense budget, it is a great example of the fact that dollars spent in one place can sometimes yield a great deal more than dollars spent someplace else.

I would like to see substantial increases in end unit strength of these units. I expect you will see not everything you want this year, but I think that you will probably find a number of the items which the subcommittee will recommend change.

Thank you very much for your testimony.

## INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

### STATEMENT OF DR. HARVEY NATHANSON, CHAIRMAN, DEFENSE SUBCOMMITTEE, COMMITTEE ON RESEARCH AND DEVELOPMENT, INSTITUTE OF ELECTRICAL ELECTRONICS ENGINEERS

### FUNCTIONS OF IEEE

Senator RUDMAN. Our next witness will be Dr. Harvey Nathanson, Institute of Electrical Electronics Engineers.

Dr. Nathanson, your entire statement will be placed in the record. We would like you to summarize it if you could.

Mr. NATHANSON. Thank you very much.

Mr. Chairman and members of the subcommittee, my name is Dr. Harvey Nathanson, and I appear before you this morning as chairman of the defense subcommittee of the Institute of Electrical Electronics Engineers' Committee on Research and Development.

The IEEE is the world's largest engineering society, with over 190,000 U.S. members, representing all disciplines of electrical and electronics engineering. In 1980, the IEEE founded its research and development committee, a mechanism through which the institute formulates and voices its concerns on Federal R&D programs and policies.

### ITEMS IN FEDERAL R&D PROGRAMS AND POLICIES

I would like to discuss each of these items:

One, protecting the 1984 6.1 and 6.2 technology base, the fiscal year 1984 budget dollars from erosion, with investment emphasis on high leverage electronics-based technology;

Two, emphasizing continuing funds for updating of the university research equipment in the United States;

Three, supporting an assured manufacturing capability for the very high speed integrated circuits, VHSIC program;

Four, continuing emphasis on the important areas of advanced materials;

Five, maintaining the historical vitality of the U.S. IR&D and B&P procedures.

One, protecting the 1984 6.1 and 6.2 technology base. The fiscal year 1984 budget for technology base 6.1 and 6.2 shows a real growth of approximately 5 percent, while the total growth for all RDT&E shows a real growth of about 24 percent. The real growth increases in the proposed fiscal year 1984 budget are heavily weighted toward the training and evaluation portion of RDT&E.

Our concern is for the technology base 6.1 and 6.2, the categories of which cover most industrial and Federal in-house research and virtually all university research effort.

In the past 2 years, there has been only moderate growth in the 6.1 and 6.2 sectors of the budget. However, proposed cuts in the budget during recent congressional action center around across-the-board levies. The result is that the technology base may not be emphasized at a time when high technology is being touted as a necessity in international competition.

## PERSONNEL PROGRAMS

Individual research projects, researcher exchange programs, and people programs—such as visiting and resident researcher/scholar programs at Federal facilities—are all funded via 6.1 and 6.2 in the technology base. Programs like these offer a significant boost to total research and development efficiency and performance and should be supported.

Two, emphasizing the university research equipment base. DOD is working to promote stronger university ties. The DOD/University Forum has been established to investigate ways to improve the university sector as a research source. Also, the summer faculty program provides research opportunities for over 200 faculty members.

## UNIVERSITY RESEARCH INSTRUMENTATION PROGRAM

In fiscal year 1983, DOD initiated the university research instrumentation program, and again in fiscal year 1984 approximately $30 million has been requested to upgrade university instrumentation and research equipment.

We would like to strongly endorse this program. Under this proposal, the universities and the Defense Department are entering into cost sharing agreements which enable:

One, an upgrading of university research equipment;

Two, an increase in the quality and quantity of graduates skilled in defense-related technologies.

Three, supporting an assured manufacturing capability for very high speed integrated circuit, VHSIC, parts. The next program we would like to address is the very high speed integrated circuits program. The IEEE first endorsed this project in May of 1979, and we have been pleased to see the Defense Department lead the way in producing the next generation of integrated circuits. Fiscal year 1984 funding has been requested to provide insertion of the technology into real life military equipment.

## TECHNOLOGY PROGRAMS

The IEEE feels that technology insertion is critical. Two areas are key:

One, a strongly supportive team of technologists, system architects and mainframe program managers to courageously and aggressively venture the necessary risk over the next half decade;

And two, a source of available VHSIC parts to build user confidence. Provisions must be made by DOD for a secure source and second sources of off the shelf high generation parts for effective introduction of this exciting technology.

We believe that VHSIC is a high payoff thrust, and hope that this committee continues to play an important role in encouraging this activity.

Four, continuing emphasis on fundamental materials development. The United States has a history of maintaining excellence in advanced materials. Key defense needs are now focused, for example, on the ultrapure growth of infrared materials such as mercury cadmium telluride and the reproducible growth of substrates of gallium arsenide, a promising semiconductor.

New materials such as these hold the key for the microwave/optical hybrid focal planes of the future. The IEEE supports the continued funding of fundamental materials research, such as is currently being carried out with such success by DARPA and the triservices. We must maintain the advantage of having strong technological seed corn available in the area of materials.

Five, maintaining the historical vitality of the IR&D and B&P procedures. The IEEE is technically concerned that proposals to treat the IR&D and bid and proposal costs as line items in the budget might inhibit Government contractors in aggressive pursuit of new higher risk technology. The vitality of this superb instrument of industrial innovation centers on the individual defense contractor being able to decide for himself the direction of his own internal research and development in such a way as to maximize his own competitive advantage.

We feel that breaking out IR&D and B&P costs as a line item might stifle innovation as companies emphasize short-term results, rather than long-term competitive position. The United States can ill afford to lose its technological momentum in this manner.

In conclusion, the IEEE Subcommittee on Defense R&D thanks you for this opportunity to address you. Our Committee is particularly supportive of:

One, a noneroded 6.⅙.2 technical base in 1984;

Two, strong support for university equipment;

Three, an assured VHSIC chip availability;

Four, continuing emphasis on electronic materials research;

And five, the maintenance of our traditionally vital IR&D and B&P procedures.

Again, IEEE thanks you for this opportunity, and I am now available to answer any questions you might have.

Senator **Rudman**. Thank you very much.

I am sure you are aware that last year the subcommittee did protect the university research base. I expect we will probably have sympathy for that again next year. I know the chairman shares that view and did last year.

The technical base cut was quite small last year. Knowing how other members of the subcommittee feel about that, it would probably be maintained at about a modest growth level for this year, I would expect.

We thank you very much for your testimony.

[The prepared statement of Dr. Nathanson follows:]

# PREPARED STATEMENT OF DR. HARVEY NATHANSON
## CHAIRMAN, DEFENSE SUBCOMMITTEE
## INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

Mr. Chairman, members of this Subcommittee, my name is Dr. Harvey Nathanson, and I appear before you this morning as Chairman of the Defense Subcommittee of the Institute of Electrical and Electronics Engineer's (IEEE) Committee on Research and Development. The IEEE is the world's largest engineering society, with over 190,000 U.S. members, representing all disciplines of electrical and electronics engineering. In 1980, the IEEE founded its Research and Development Committee, a mechanism through which the Institute formulates and voices its concerns on Federal R&D programs and policies.

Because of the breadth of the IEEE, there are many defense research and development programs under consideration which impact both our membership and the technologies they represent.

I would like to highlight five action items of particular concern to IEEE which we would propose to be implemented in the 1984 DOD budget:

- o Protecting the 1984 6.1 and 6.2 Technology Base dollars from erosion, with investment emphasis on high leverage electronics-based technology
- o Emphasizing continuing funds for updating of the University Research Equipment in the U.S.
- o Supporting an assured manufacturing capability for the Very High Speed Integrated Circuits (VHSIC) Program
- o Continuing emphasis on the important area of advanced materials
- o Maintaining the historical vitality of the U.S. IR&D and B&P procedures

## I. PROTECTING THE 1984 6.1 and 6.2 TECHNOLOGY BASE

The FY-84 budget for Technology Base (6.1 and 6.2) shows a real growth of approximately 5% while the total growth for all RDT&E shows a real growth of about 24%. The real growth increases in the proposed FY-84 budget are heavily weighted toward the Training and Evaluation portion of RDT&E.

Our concern is for the Technology Base (6.1 and 6.2), the categories of which cover most industrial and federal in-house research and virtually all university research effort.

In the past two years there has been only moderate growth in the 6.1 and 6.2 sectors of the budget. However, proposed cuts in the budget during recent congressional action center around across-the-board levies.

The result is that the Technology Base may not be emphasized at a time when high technology is being touted as a necessity in international competition.

Individual research projects, researcher exchange programs, and "people programs" (such as visiting and resident researcher/scholar programs at Federal facilities) are all funded via 6.1 and 6.2 in the Technology Base. Programs like these offer a significant boost to total research and development efficiency and performance and should be supported.

## II. EMPHASIZING THE UNIVERSITY RESEARCH EQUIPMENT BASE

DOD is working to promote stronger university ties. The DOD/University Forum has been established to investigate ways to improve the university sector as a research source. Also, the Summer Faculty program provides research opportunities for over 200 faculty members. In FY 1983, DOD initiated the University Research Instrumentation Program, and again in FY 1984 approximately $30 million has been requested to upgrade university instrumentation and research equipment. In line with our previous testimony, we would like to strongly endorse this program. Under this proposal, the universities and the Defense Department are entering into cost sharing agreements which enable:

1. An upgrading of University research equipment
2. An increase in the quality and quantity of graduates skilled in defense-related technologies.

Some of the most important defense efforts either directly or indirectly involve improved electronics or computer-related capabilities. We stress the need for DOD to support University research in order to assure that our science and engineering manpower is of adequate quantity and quality to support our defense research needs in a variety of technology fields. Though we are pleased with the initiatives noted above, we are concerned that the proportion of RDT&E funding being allocated to universities is going down. We urge you to carefully monitor this trend and its potential effects on the strength of our university resources.

## III. SUPPORTING AN ASSURED MANUFACTURING CAPABILITY FOR VERY HIGH SPEED INTEGRATED CIRCUIT (VHSIC) PARTS

The next program we would like to address is the Very High Speed Integrated Circuits (VHSIC) program. The IEEE first endorsed this project in May of 1979, and we have been pleased to see the Defense Department lead the way in producing the next generation of integrated circuits. FY 1984 funding has been requested to provide insertion of the technology into real life military equipment.

The IEEE feels that technology insertion is critical. Two areas are key: 1) A strongly-supportive team of technologists, system architects and mainframe program managers to courageously and aggressively venture the necessary risk over the next half decade and 2) a source of available VHSIC parts to build user confidence. Provisions must be made by DOD for a secure source and second-sources of off-the-shelf high generation parts for effective introduction of this exciting technology.

We believe that VHSIC is a high payoff thrust, and hope that this Committee will play an important role in encouraging this activity.

## IV. CONTINUING EMPHASIS ON FUNDAMENTAL MATERIALS DEVELOPMENT

The United States has a history of maintaining excellence in advanced materials. Key defense needs are now focused, for example, on the ultra-pure growth of infrared materials such as Mercury Cadmium Telluride and the reproducible growth of substrates of Gallium Arsenide, a promising semiconductor. New materials such as these hold the key for the microwave/optical hybrid focal planes of the future.

The IEEE supports the continued funding of fundamental materials research, such as is currently being carried out with such success by DARPA and the Tri-Services. We must maintain the advantage of having strong technological "seed corn" available in the area of materials.

## V. MAINTAINING THE HISTORICAL VITALITY OF THE IR&D AND B&P PROCEDURES

The IEEE is concerned that proposals to treat the IR&D and Bid and Proposal costs as a line-item in the budget might inhibit government contractors in aggressive pursuit of new higher-risk technology. The vitality of this superb instrument of industrial innovation centers on the individual defense contractor being able to decide for himself the direction of his own internal research and development in such a way as to maximize his own competitive advantage.

We feel that breaking out IR&D/B&P costs as a line item might stifle innovation as companies emphasize short-term results, rather than long-term competitive position. The U.S. can ill-afford to lose its technological momentum in this manner.

In conclusion, the IEEE Subcommittee on Defense R&D thanks you for this opportunity to address you. Our committee is particularly supportive of 1) a non-eroded 6.1/6.2 technical base in 1984, 2) strong support for university equipment, 3) an assured VHSIC chip availability, 4) continuing emphasis on electronic materials research and 5) the maintenance of our traditionally vital IR&D & B&P procedures.

Again, IEEE thanks you for this opportunity and I am now available to answer any questions you might have.

Harvey C. Nathanson

Dr. Harvey C. Nathanson is manager of Microelectronics at the Westinghouse Research Laboratories in Pittsburgh, PA. His operation conducts applied research and development in support of divisional goals in such activities as ultra-pure semiconductor crystal growth, high speed integrated circuits and microwave power IC's. He has over 20 patents in the field of solid state devices and has given numerous invited papers in the field of microwave integrated circuits and novel semiconductor device structures.

Dr. Nathanson was National President of the Electron Device Society of the IEEE during the years 1978-79. He is a member of the DOD's Advisory Group on Electron Devices and is presently the Chairman of the DOD Subcommittee of the R&D Committee of IEEE.

As well as being a member of Eta Kappa Nu and Sigma Xi, Dr. Nathanson is a Fellow of the IEEE and listed in Who's Who in America.

## NATIONAL GUARD ASSOCIATION OF THE UNITED STATES

### STATEMENT OF MAJ. GEN. FRANCIS S. GREENLIEF, NATIONAL GUARD OF THE UNITED STATES, RETIRED, EXECUTIVE VICE PRESIDENT, NATIONAL GUARD ASSOCIATION OF THE UNITED STATES

#### NATIONAL GUARD READINESS LEVELS

Senator **RUDMAN**. The next witness is Maj. Gen. Francis S. Greenlief of the National Guard, executive vice president of the National Guard Association of the United States.

General **GREENLIEF**. Good morning, Mr. Chairman.

Mr. Chairman and members of the committee, I would like to submit my full statement for the record and present some of the highlights.

Senator **RUDMAN**. It will be printed in full.

General **GREENLIEF**. My full statement does discuss the levels of readiness demanded of the National Guard, the current readiness levels of the Army and the Air National Guard, and specific recommendations for additional funds in the personnel, operation and maintenance and major equipment procurement appropriations.

We of the National Guard are rightfully proud of the share of the Army and Air Force structures which we provide, but some of that force structure is more apparent than real. Administrations, Pentagon staffs, and Congresses have for years been planning for a war that occurs in the fifth year of a given POM cycle. The war we are more apt to fight is a war that starts tomorrow or a month from tomorrow.

It is our view that the force structure on the day the war starts is not the force structure listed in the Pentagon's computers. Rather, it is the force that can be equipped by the day it is scheduled to deploy. And yet, clearly the National Guard must obtain and maintain required readiness standards if this Nation is to be able to fight and win a conventional war.

Although there are other reasons, two major reasons for the ANG's better readiness ratings as compared to the ARNG are more modern equipment and higher levels of equipment, and much higher levels of full-time support personnel, for example, military technicians and the so-called AGR personnel.

#### PERSONNEL: ARNG UNIT STRENGTH

The programed end strength for the ARNG for fiscal year 1984 is 421,019. The States have advised the National Guard Bureau that they can attain an end strength of 428,000 in fiscal year 1984. The ARNG is programed to attain a fiscal year 1988 end strength of between 450,000 and 460,000, thus attaining full war strength.

We believe that the ARNG should be permitted and encouraged to take advantage of the favorable recruiting environment that exists, while it exists. The cost of the additional strength for fiscal year 1984 is estimated to be $84 million.

#### FULL-TIME SUPPORT PERSONNEL

The Army Guard will be short 7,420 full-time support personnel at end fiscal year 1984. An increase in the number of full-time support personnel would be one of the quickest and most effective methods of improving training and materiel readiness.

We recommend that your subcommittee recommend additional funds to permit the employment of an additional 1,000 full-time personnel in the ARNG during fiscal year 1984. We estimate the cost of these added 1,000 full-time personnel to be about $13 million.

The ANG will be short 2,562 personnel from the number which the Air Force estimates as the end fiscal year 1984 requirement to bring ANG units to the required level of readiness. We urge that your subcommittee recommend additional funds to permit the employment of an additional 500 full-time personnel in the ANG during fiscal year 1984, at an estimated cost of $6.8 million.

### OPERATIONS AND MAINTENANCE

We recommend that additional funds be provided for both the Army Guard and the Air Guard.

### ARMY GUARD AND LOGISTICAL SUPPORT

The shortage of organizational clothing and equipment is predicted to be $314.6 million at end fiscal year 1983, even after the generous congressional add-on. Because of increased requirement, normal wearout and the reduced funding in the fiscal year 1984 budget, the shortage at end fiscal year 1984 is estimated to be $417.4 million.

The logistical support budget provides spare parts in adequate amounts to support training. However, no funds are provided to procure a parts load list, PLL, for combat operations. More than two-thirds of the ARNG force structure is scheduled to deploy in 60 days or less after D-Day.

We question that the necessary PLL could be procured during the few weeks available while ARNG units were preparing for deployment. If ARNG units are to be prepared to function and fight after deployment, PLL is a readiness requirement which must be filled.

On depot maintenance, we recommend that the fiscal year 1984 budget request for Air Guard depot maintenance is $7.8 million below the fiscal year 1983 level of effort. We recommend that $7.8 million be added to this budget account so as to maintain the required level of effort and avoid the deferral of maintenance of F-4 aircraft to fiscal year 1985.

### PROCUREMENT OF MAJOR EQUIPMENT

In the past 2 years the Congress has added $1.07 billion to the defense budgets for equipment for the Guard and Reserves. These add-ons, plus the new equipment report requirement, riveted the attention of the military services on the Guard and Reserve's equipment requirements.

Regrettably, however, the shortage of combat deployable equipment in the Army National Guard is estimated to be about $4 billion. What is needed is a 5-year plan to satisfy that $4 billion shortage as an integral part of a fully funded plan to complete the modernization of the total Army.

We estimate the cost of equipping the Air National Guard so as to utilize its full potential to man weapons systems is more than $5 billion. We urge that a $5 billion equipment package be included as part of a long-range program to modernize the total Air Force.

### NGAUS RECOMMENDATIONS

The NGAUS has made specific recommendations to the Committees on Armed Services for additional authority for the procurement of equipment for the Army and Air National Guard. The estimated cost of the Army National Guard recommendations is $215.5 million. The estimated cost of the Air National Guard recommendation is $1.325 billion.

We urge that your subcommittee recommend funding to support such additional authorization as may be provided by the fiscal year 1984 defense authorization bill.

Mr. Chairman, it is, as always, a privilege and pleasure to present the views of the National Guard Association to you in support of National Guard appropriations.

Specifically, I have recommended an increase in the National Guard personnel army appropriation in the amount of $84 million to permit the ARNG to recruit up to its full potential in fiscal year 1984, and I have recommended an increase of $40 million to the ARNG operation and maintenance appropriations for the procurement of organizational clothing and equipment and for repair parts.

I have recommended the addition of $7.8 million to the ARNG operation and maintenance appropriation for an increased level of effort in depot maintenance.

I have recommended the addition of $13 million for additional ARNG full-time support personnel in the Army Guard and $6.8 million for additional full-time support personnel in the Air Guard.

Finally, Mr. Chairman, I strongly urge that your subcommittee recommend appropriations to support whatever additional authorization for the procurement of major equipment for the National Guard is included in the fiscal year 1984 defense authorization bill.

Thank you, and I will be pleased to attempt to answer your questions.

[The prepared statement of General Greenlief follows:]

# NATIONAL GUARD ASSOCIATION OF THE UNITED STATES

STATEMENT BY

MAJOR GENERAL FRANCIS S. GREENLIEF (RET.)

EXECUTIVE VICE PRESIDENT

Mr. Chairman, and members of the subcommittee, I appreciate this opportunity to present the views of the National Guard Association of the United States on the needs of the Army and Air National Guard for appropriations for Fiscal Year 1984. My statement discusses the level of readiness demanded of the National Guard, the current readiness levels of the Army and Air National Guard, and specific recommendations for additional funds in the Personnel, Operation and Maintenance, and major equipment Procurement Appropriations.

## CURRENT ROLE OF THE NATIONAL GUARD

In past years, I have cited to this subcommittee the percentages of total Army and total Air Force combat capability which the National Guard provides and those percentages are truly significant. Recently, the distinguished Vice Chief of Staff, U.S. Army, summed it all up in a more impressive way. General John A. Wickham said: "* * * the total U.S. Army Force relies on the Reserves — Reserve components — for 46% of its combat power, and 70% of its combat service support. The U.S. Air Force relies on the Air Reserve components for 66% of the Tactical Air Command's interceptor forces, and 50% of the Military Airlift aircraft crews. In terms of NATO alone, over 350 Reserve component combat battalions, and more than 2,000 Reserve component combat service support units will be required in the first 60 days of a European war." Parenthetically, I point out that the 66% of TAC's interceptor forces are all Air National Guard and that most of the 350 combat battalions are Army National Guard.

Obviously, General Wickham does not consider D+60 to be a late deployment. Nor do we. We consider any unit which is expected to deploy to NATO in 60 days an early deployer. More than two-thirds of the total ARNG force is scheduled to deploy within 60 days, including seven of the eight ARNG combat divisions. Air National Guard flying units are scheduled to deploy in 48 hours.

However, there are those who, when allocating resources, seem to believe that D+60 units are late deployers and hence less deserving of resources. Unless we as a nation are prepared to return to the "short war philosophy," the Total Army force structure must be provided sufficient support to permit the accomplishment of wartime missions.

We of the National Guard are rightfully proud of the share of the Army and Air Force structure which we provide, but some of that force structure is more apparent than real. Administrations, Pentagon staffs, and Congresses have for years been planning for a war that occurs in the fifth year of a given POM cycle. The war we are more apt to fight is a war that starts tomorrow or a month from tomorrow. It is our view that the force structure on the day the war starts is not the force structure listed in the Pentagon's computers. Rather, it is the force than can be equipped by the day it is scheduled to deploy.

In our view, there should be no expansion of the total Army force structure until there is some real commitment to fully equip the existing force structure.

The Air National Guard (ANG) is equipped and supported to fight now. Although two aircraft types are only marginally capable at best, the entire ANG fleet is equipped to fly and fight now. The Air Guard has great potential for expanding its combat capability without creating new units now.

The extraordinary readiness demands placed on the National Guard in the current environment were dramatized by Secretary of Defense Weinberger when he pointed out that on a given day "a large portion of our (U.S.) forces are forward deployed," within range of enemy artillery. If hostilities were to occur, our troops would be engaged instantly. The situation is exacerbated by the reality that U.S. force — active, Guard and Reserves must be in position to respond to aggression effectively wherever and whenever our vital interests are threatened. In that framework the Secretary of Defense on 21 June 1982 said to the Service Secretaries and the Chairman of the JCS: "Reserve Force readiness will continue to be an issue of foremost importance. The Guard and Reserve must be prepared and maintained in a state of readiness for immediate use should the need arise."

In 1981, there were 525 Army National Guard (ARNG) units in the Intensive Management Force (IMF). In 1982 that number rose to 1,018, clearly demonstrating an increased readiness requirement.

Clearly the National Guard must attain and maintain required readiness standards if this nation is to be able to fight and win a conventional war.

Since readiness, or C ratings, of units is classified, it is not possible to provide specific data. However, the trend for the ARNG is good, and the readiness of ANG units is outstanding. In 1978 61% of reporting ARNG units were rated deployable, i.e., C-3 or better. In 1982 64% of reporting ARNG units were deployable. Over 97% of all ANG flying units were rated C-3 or better, and thus deployable in 1982.

Although there are other reasons, two major reasons for the ANG's better readiness ratings (as compared to the ARNG) are more modern equipment and higher levels of equipment, and much higher levels of full-time support personnel, i.e. military technicians and AGR personnel.

## PERSONNEL

### ARNG Unit Strength

The programmed end strength for the ARNG in FY 1984 is 421,019. The States have advised the National Guard Bureau that they can attain an end strength of 428,000 in FY 1984. The ARNG is programmed to attain an FY1988 end strength of between 450,000 and 460,000, thus attaining full war strength. We believe lthat the ARNG should be permitted and encouraged to take advantage of the favorable recruiting environment that exists, while it exists. The cost of the additional strength for FY 1984 is estimated to be $84 million.

### ANG Unit Strength

The ANG FY 1984 programmed end strength is 104,104, which will permit flying units to be manned at 99.1% of wartime strength and permit non-flying units to be manned at 96.4%. We are proud of the Air Guard's ability to recruit, and we are pleased with the budgeted manpower program.

### Full-Time Support Program

The program of converting vacant technician spaces to full-time military spaces was terminated by the Congress in the FY 1983 Appropriation Bill. The decision of the Committees on Appropriations was to put a floor under the technician program at the 1982 level and to permit growth in the AGR program.

The FY 1984 budget provides the following full-time support for the ARNG and the ANG:

| | ARNG | ANG |
|---|---|---|
| Technicians | 22,613 | 21,846 |
| AGR | 18,630 | 5,578 |

The AGR growth provided in this budget is essential to the continued improvement in the readiness of the National Guard.

The ARNG will be short 7,420 full-time support personnel at end FY 1984. An increase in the number of full-time support personnel would be one of the quickest and most effective methods of improving training and materiel readiness. We recommend that your subcommittee recommend additional funds to permit the employment of an additional 1,000 full-time personnel in the ARNG during FY 1984. Since the Committees on Appropriations have mandated that the most cost-effective category of personnel be employed, we recommend that the National Guard Bureau determine whether these personnel should be military technicians or AGR personnel. We estimate the cost of these added 1,000 full-time personnel to be about $13 million.

The ANG will be short 2,562 personnel from the number which the Air Force estimates as the end FY 1984 requirement to bring ANG units to the required level of readiness. We urge that your subcommittee recommend additional funds to permit the employment of an additional 500 full-time personnel in the ANG during FY 1984 at an estimated cost of $6.8 million. As with our recommendation relative to the ARNG, we recommend that the National Guard Bureau make the determination as to the category of personnel to be authorized for the additional employment.

## OPERATIONS AND MAINTENANCE

Appropriations provided in the Operation and Maintnenance Appropriations support the National Guard in its day-to-day training to produce combat readiness. In addition, this appropriation provides the funds for the purchase of organizational clothing and equipment needed by National Guard personnel to perform their wartime mission, and spare parts with which to maintain equipment for training and for combat. We recommend that additional funds be provided for both the Army and Air National Guard.

## ARMY NATIONAL GUARD

### Training Operations

Although the FY84 programmed end strength is about 4,000 greater than the FY83 end strength and although there are programmed increases in training operations in FY84, the FY84 Training Operations budget account is essentially a no-growth budget. Although this account has been increased by $.6 million for cost growth, the program level of effort is reduced by $.3 million. This program is intended to support the exciting introduction of M-1 tanks into a North Carolina armored battalion and introduces Roland into New Mexico air defense units. Nevertheless, the Training Operations Budget looks like business as usual.

### Logistical Support

The Congress added $38.9 million to the ARNG O&M budget for logistical support -- specially for organizational clothing and equipment and chemical defense equipment in the FY83 budget. The FY84 budget request for Logistical Support is $59.9 million less than the FY83 appropriation, thus the DoD cut the ARNG budget for Logistical Support about $20 million below the FY83 budget request.

The shortage of Organizational Clothing and Equipment is predicted to be $314.6 million at end FY83, even after the generous Congressional add-on. Because of increased requirement, normal wear out and the reduced funding in the FY84 budget, the shortage at end FY84 is estimated to be $417.4 million.

The Logistical Support budget provides spare parts in adequate amounts to support training. However, no funds are provided to procure a Parts Load List (PLL) for combat operations. More than two thirds of the ARNG force structure is scheduled to deploy in 60 days of less after D Day. We question that the necessary PLL could be procured during the few weeks available while ARNG units were preparing for deployment. If ARNG units are to be prepared to function and fight after deployment, PLL is a readiness requirement which must be filled. On page 15 of the DA Justification of Estimates for Fiscal Year 1984 for O&M ARNG is a table which shows the ARNG FY84 end year backlog for parts to be $133.6 million.

### Depot Maintenance

This account provides for the major overhaul of aircraft, surface vehicles and other equipment beyond the capability of the States to maintain. The maintenance is performed by the Army Industrial Fund and contract. The FY84 budget request includes $5.6 million for cost growth and what the Pentagon calls "negative program growth" of $6.7 million. Thus, the FY84 budget request is $1.11 million less than the FY83 request.

## AIR NATIONAL GUARD

The ANG O&M budget supports both the flying and non-flying units of the ANG. Flying units consist of 24 wings, 67 groups and 91 flying squadrons. They provide 65% of the total Air Force Air Defense Interceptor forces, 53% of Tactical Reconnaissance forces, 32% of Tactical Airlift forces, 26% of Tactical Fighter forces, 17% of Aerial Refueling forces, 14% of Rescue and Recovery forces, 19% of Electronic Combat forces and 32% of Tactical Air Support forces. Fifteen of these flying units have been assigned missions in the Central Command (formerly known as the Rapid Deployment Joint Task Force). The 240 non-flying units of the ANG contribute heavily to the combat communications, weather, tactical control, engineering installation, civil engineering and air base defense capabilities of the Air Force.

The high degree of reliance which the Air Force places in the non-flying units of the Air Guard is demonstrated by the fact that the Air Force has placed 70% of its combat communication capability in the ANG. The high level of readiness that exists in these units is demonstrated by the fact that 1400 personnel of ANG combat communications units provided communication support to Air Force units conducting exercises in Europe and Korea.

The combat readiness of the ANG is held below its full capability by its older aircraft, and by shortages in funding for depot maintenance and full-time support personnel.

### Mission Forces

This budget account provides funds for the operation of flying and non-flying units. Although this budget account is reduced $6.6 million below the FY83 level, the reduction is the result of program growth of $44.8 million off-set by a reduction of prices, primarily fuel, of $23.8 million. In addition, the FY83 appropriation level has been reduced by $14.4 million, the amount of the 1983 congressional add-on. The flying hour program is increased by more than 4,000 hours, and the number of aircraft in the ANG inventory will be increased in FY84.

## Depot Maintenance

This budget account provides funds for payment to the Air Force Logistics Command for depot maintenance performed on ANG aircraft and other equipment. Although this budget account for FY84 is $2.7 million less than the FY83 level, the level of effort, except for KC-135 reengining, is $10.9 million greater than FY83. The increased Depot Maintenance programmed is in support of C-130 and F-4 aircraft.

The Congress added $65.8 million for the JT-3D reengining of the KC-135 aircraft in FY83.

## Other Support

This budget account provides funds for flying cost associated with support aircraft, operating costs of the Air Directorate of the National Guard Bureau, Real Property Maintenance funds, and Base Operating Support funds for the seven bases for which the ANG is the host or single manager. This budget account continues the FY83 level of effort with $2.7 million added for price growth while the program has been reduced by $1.3 million.

## Recommended Additions

Depot Maintenance — The FY84 budget request is $7.8 million below the FY83 level of effort. We recommend that $7.8 million be added to this budget account so as to maintain the required level of effort and avoid the deferral of maintenance to FY85.

Full-Time Support Personnel — The ANG is short 2,562 personnel from the number which the Air Force validates as the full requirement to produce required readiness in ANG units. We recommend that this subcommittee add authority to employ an additional 500 full-time support personnel in FY84 at an estimated cost of $6.8 million. As with our recommendation relative to the ARNG, we recommend that the National Guard Bureau determine whether these additional personnel be military technicians or AGR personnel.

## PROCUREMENT OF MAJOR EQUIPMENT

Two years ago, the National Guard Association of the United States made modernization and full equipping of the National Guard, Army and Air, its highest priority.

We have been delighted with the response of the United States Congress. In these two years, the Congress has added $1.07 billion to the defense budgets for equipment for the Guard and Reserves. These add-ons, plus the new equipment report requirement, riveted the attention of the military services on the Guard and Reserves equipment requirements. Regrettably, however, the shortage of combat deployable equipment in the Army National Guard is estimated to be about $4 billion. Although we are appreciative of the Congressional add-ons of the past two years and the attention focused on our problem by the equipment report, much remains to be done.

What is needed is a five-year plan to satisfy that $4 billion shortage as an integral part of a fully funded plan to complete the modernization of the Total Army."

The Air Force has been able to do a better job of equipping and supporting Air National Guard units than the Army has been able to do for ARNG units, but the needs of the Air Guard are great. We estimate that the cost (in FY 1982 dollars) of equipping the Air National Guard so as to utilize its full potential to man weapons systems is more than $5 billion. In addition, there is a requirement of $300 million for combat communications equipment, $17.9 million for vehicles, and $9 million for medical equipment.

We urge that a $5 billion equipment package be included as part of the program to modernize the "Total Air Force."

The NGAUS has made specific recommendations to the Committees on Armed Services for additional authority for the procurement of equipment for the Army and Air National Guard. The estimated cost of the Army National Guard recommendations is $215.5 million. The estimated cost of the Air National Guard recommendation is $1.325 billion.

We urge that your subcommittee recommend funding to support such additional authorization as may be provided by the FY 1984 Defense Authorization Bill.

## SUMMARY

Mr. Chairman, as always, it has been a privilege and a pleasure to present the views of the National Guard Association to you in support of National Guard appropriations.

I have recommended an increase in the National Guard Personnel Army Appropriation in the amount of $84 million to permit the ARNG to recruit up to its full potential in FY 1984, and I have recommended an increase of $40 million to the ARNG Operation and Maintenance Appropriations for the procurement of organizational clothing and equipment and for repair parts.

I have recommended the addition of $7.8 million to the ARNG Operation and Maintenance Appropriation for an increased level of effort in depot maintenance.

I have recommended the addition of $13 million for additional ARNG full-time support personnel and $6.8 million for additional ANG full-time support personnel.

Finally, Mr. Chairman, I strongly urge that your subcommittee recommend appropriations to support whatever additional authorization for the procurement of major equipment for the National Guard is included in the FY84 Defense Authorization Bill.

Thank you, and I will be pleased to attempt to answer your questions.

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## BIOGRAPHY

MAJOR GENERAL FRANCIS S. GREENLIEF (Ret.)
Executive Vice President
National Guard Association of the United States (1974-    )

Major General Francis S. Greenlief joined the staff of the National Guard Association of the United States in September 1974, after retiring as chief, National Guard Bureau on 1 July 1974. He was appointed the executive vice president of the 54,000-member Association in September, 1975.

General Greenlief was born in Hastings, Nebraska on 27 July 1921. He completed high school there and enrolled in the University of Nebraska in 1939 to study business administration.

He enlisted in Company G, 134th Infantry, Nebraska National Guard in Hastings on 5 July 1940, and was ordered to active duty with his unit on 23 December 1940 as a corporal. At the time of his entrance to Infantry Officer Candidate School in May 1942, he was acting first sergeant of the same company.

General Greenlief was graduated from Officer Candidate School and was commissioned a second lieutenant, Infantry, on 25 August 1942. He served as platoon leader and commanding officer, Company L, 134th Infantry in the European Theater of Operations from May 1944 until August 1945, participating in the Normandy, Northern France, Rhineland, and Ardennes Campaigns. He was released from active duty on 5 January 1946.

On 3 November 1947, General Greenlief rejoined the Nebraska National Guard as commanding officer, Company G, 134th Infantry. He subsequently served as S-3 of the 134th Infantry Regiment, acting assistant adjutant general of Nebraska, G-4 of the 34th Infantry Division and division chief of staff. He was promoted to colonel on 1 July 1957.

As a colonel, he was ordered to active duty from the Nebraska Army National Guard and assigned as executive officer, Army Division, National Guard Bureau on 1 January 1960. He was appointed brigadier general and designated assistant chief (Army), National Guard Bureau, on 3 November 1962.

General Greenlief was appointed as deputy chief, National Guard Bureau, on 14 September 1963 and was promoted to major general on 9 February 1965. On 13 September 1967, he was extended for an additional four-year term. On 20 April 1970, he was appointed director, Army National Guard in addition to his duties as deputy chief, National Guard Bureau.

## MINUTEMAN SITES

Senator RUDMAN. Thank you very much. We appreciate your testimony.

Mr. Chairman.

Senator STEVENS. I have no questions. I think they are very good recommendations. I will look long and hard at your full statement.

Senator RUDMAN. I just wanted to observe that over this past weekend I made a trip to Grand Forks to look at the Minuteman sites. Since we had Sunday out there, Senator Andrews arranged for me to spend the day with the Air National Guard unit flying F-4's out of Fargo, and Gen. Sandy McDonald spent the day with me.

I have to tell you, I watched that unit train, and I know something about aviation. I was deeply impressed by, one, the way they maintained their equipment; and two, the way they flew that equipment; and three, also their overall state of readiness.

It was as good as any regular air unit I have ever seen anywhere. Of course the pilots are extraordinarily experienced because they are people with many years of experience. Many of them fought both in Korea and in Vietnam. Some of the younger men had many missions in Vietnam.

They went over their list of problems, which, Mr. Chairman, was just pitifully small in terms of what they needed to bring those F-4's up to full combat capability: which were upgrading radar and some additional weapons systems.

It seems to me, as I am going to convey it to the rest of the subcommittee, that we will get, as I have said to the gentleman from the Navy, more than a dollar's worth of value for a dollar spent with these Guard and Reserve units. This goes for the Army Guard as well.

I have to tell you that I have never seen anything quite like that unit out there in Fargo. They are first rate.

General **Greenlief**. Mr. Chairman, that is an outstanding unit. I would have to say it is almost as good as the tanker unit in New Hampshire.

Senator **Rudman**. They are a good unit also.

### INCREASE IN FUNDING

Senator **Stevens**. Let me ask. The staff tells me the Army takes the position there is about $1 billion earmarked for the Army National Guard. Your recommendations are in addition to that $1 billion?

General **Greenlief**. Yes, sir. I assume that the comment refers to the information in the equipment report that was submitted to the Senate Armed Services Committee. My memory is—and I cannot be very precise, but I can check it very quickly—with that total amount of equipment, No. 1, they are not talking about new procurement that is coming from Army stocks.

But at the early part of the year they showed something like $700 million of equipment coming to the Army Guard, but they could not produce a list to identify the equipment. That causes some question as to how did they make the list. I would assume by now they have the list.

The source of my information is the House Armed Services Committee.

Senator **Stevens**. Thank you very much.

Senator **Rudman**. Thank you.

## The American Legion

### STATEMENT OF ALAN M. OLSZEWSKI, ASSISTANT DIRECTOR, NATIONAL LEGISLATIVE COMMISSION, THE AMERICAN LEGION

### ACCOMPANIED BY JAMES HUBBARD, DEPUTY DIRECTOR, NATIONAL SECURITY/FOREIGN RELATIONS COMMISSION, THE AMERICAN LEGION

### MODERNIZATION OF WEAPONS SYSTEMS

Senator **Rudman**. Our next witness is Mr. Alan Olszewski, assistant director, national legislative commission, the American Legion. He is accompanied by James Hubbard.

Mr. **Olszewski**. Mr. Chairman——

Senator **Rudman**. Did I pronounce your name correctly?

Mr. **Olszewski**. Excellent. That is the first time in years.

Senator **Rudman**. We have a number of Olszewski's in New Hampshire.

Mr. **Olszewski**. Thank you.

Senator **Stevens**. That is pronounced "Olszewski"?

Mr. **Olszewski**. That is exactly right. It is a common name in Poland.

Mr. Chairman and members of the committee: The American Legion is pleased to once again be provided the opportunity to share with you the concerns of our membership on the fiscal year 1984 defense budget.

I am joined today by Jim Hubbard, deputy director of our national security commission. We will be presenting a summary of our complete statement. Following Mr. Hubbard's statement, both of us will be available to answer any questions you may have.

Further, Mr. Chairman, I ask that the entire statement, with the attached resolutions, be made a part of the record.

Senator RUDMAN. Without objection, it will be.

Mr. HUBBARD. Thank you, Mr. Chairman. It is nice to be here this morning.

At the outset, I think it is important to recognize that the annual debate over the defense budget is really a debate of national will, a debate of how far we are willing to go in terms of the allocation of taxpayer dollars to insure the continuation of our way of life on this continent.

Further, we would caution against the propensity to defer procurement of modern weapons systems in favor of newer, more expensive systems to be deployed some time in the future. The Legion firmly believes that this Nation cannot deter war and insure peace with vast collections of engineering drawings on new systems and old, marginally capable weapons designed and deployed years ago. We need to modernize now.

With the above in mind, we would like to focus our discussion today on three areas of concern.

### MX MISSILE

First, the MX missile or, more generally, the proposals offered by the President's Commission on Strategic Forces. The Commission stressed that all recommendations must be taken together, and that no single recommendation was an acceptable separate solution. It is useful at this point to quote from the Commission report:

> The Commission has concluded that the preferred approach for modernizing our ICBM forces seems to have three components: initiating engineering design of a single warhead small ICBM, to reduce target value and permit flexibility in basing for better long-term survivability; seeking arms control agreements designed to enhance strategic stability; and deploying MX missiles in existing silos now to satisfy the immediate needs of our ICBM force and to aid that transition.
>
> In the meantime, however, deployment of MX is essential in order to remove the Soviet advantage in ICBM capability and to help deter the threat of conventional or limited nuclear attacks on the alliance. Such deployment is also necessary to encourage the Soviets to move toward the more stable regime of deployments and arms control outlined above.
>
> The Commission stresses that these two aspect of ICBM modernization and this approach toward arms control are integrally related. They point toward the same objective—permitting the U.S. and encouraging the Soviets to move toward more stable ICBM deployments over time in a way that is consistent wtih arms control agreements having the objective of reducing the risk of war. The Commission is unanimous that no one part of the proposed program can accomplish this alone.

Mr. Chairman, the American Legion supports this conclusion of the President's Commission on Strategic Forces. We have long believed that the only way to bring the Soviets to the bargaining table to discuss meaningful arms control is to show them that their unwillingness to bargain will not be met with unilateral disarmament but with ever-growing American strength and determination.

Deployment of 100 MX missiles in existing silos will demonstrate to the Soviets that we do not intend to concede many years of Soviet advantage in these highly accurate systems. It is unwise to think that the Soviets will agree to meaningful arms control and reductions if we unilaterally kill the only modernization program currently under way.

It is useful at this point to examine a quote from the separate statement of former Secretary of Defense Harold Brown, a consultant to the President's Commission:

> Recall that we said in the early 1970's that we would modernize with a new missile in the late 1970's. In the mid-1970's, we said that we would do so in the early 1980's, and in the late 1970's that we would in the mid-1980's. We have failed so far to do any of those things, even while the Soviets were deploying over 600 new ICBM's, each with a payload equal to or greater than that of MX, and with accuracies now matching those of the most accurate U.S. ICBM's.
>
> To say that the United States will modernize in the early 1990's with a small single-warhead missile will just not be believable. The Soviets would be justified in calculating that any new U.S. ICBM system will be aborted by some combination of environmental, doctrinal, fiscal, and political problems.

### B-1B BOMBER PROCUREMENT

Our second area of concern, Mr. Chairman, is the administration's request for $6.1 billion for procurement of the B-1B bomber. The bomber is the long leg of the triad which provides the National Command Authority the greatest degree of latitude in the decision-making process during a time of crisis. The launch of weapons-carrying aircraft can signal national resolve during a critical period with a high degree of confidence that crews can be redirected or recalled as the situation develops.

The B-1B will be fully capable of penetrating the Soviet Union well into the 1990's. This will allow designated B-52's to be employed for the cruise missile carriage mission. To keep the B-52's as a viable penetrating weapon system over the next decade and beyond would require numerous expensive modifications.

At this point I should say, since November we lost five B-52's, for one reason or another. They are an old aircraft. Their airframes are aging and their operation and maintenance costs will grow at an increasing rate.

In view of developments in Stealth technology, the acquisition of penetrating advanced technology bombers should start in the 1990's. The B-1B would be even more important if current expectations in regard to advanced technology bombers do not materialize.

Soviet advances in air defense, and to a lesser degree in offensive weapons, will make the current bomber force increasingly vulnerable.

For these reasons, Mr. Chairman, it is imperative that we modernize the bomber force now rather than wait for some future developments.

### O&M FUNDING FOR FISCAL YEAR 1984

Our third area of concern is operations and maintenance funding for fiscal year 1984. The Legion is well aware of congressional sentiment to cut the defense budget. As you know, cutting procurement saves very little in outlays for the current fiscal year.

Reducing personnel sends the wrong signal to the other side, and at the same time increases the reliance on the strategic nuclear forces, thereby lowering the nuclear threshold and increasing the danger of an exchange. The only other area where cost savings can be realized is operations and maintenance.

O&M funding impacts directly on the day-to-day operations of every unit commander at every level of command. O&M is the life blood of military readiness. Without a steady stream of spare parts, neither equipment nor weapons systems can be relied upon to perform when needed.

Also, we must recognize that one's work environment plays a major part in career decisionmaking for our troops. Equipment mechanics, unable to obtain spare parts for the vehicles and aircraft they are charged with maintaining, will rapidly develop an "I do not care" attitude once they perceive that the parts are not available due to funding constraints.

Nothing more directly affects a fighter pilot's morale than reducing his flying hours to conserve fuel when in fact he is deeply aware that those hours flown are barely maintaining his flying proficiency and minimal safety standards.

The finely honed edge of military preparedness is finally mastered when those two elements of confidence have been achieved and demonstrated by individuals who accomplish in training what they believe will be expected of them in combat.

All this is done with O&M funds. We cannot afford to underestimate the factors of morale and confidence in self and equipment when discussing the retention of highly qualified people. The American Legion urges you to resist the temptation to take any shortcuts by reducing O&M funds through a perception of greater need elesewhere.

## SUMMARY REMARKS

To summarize, Mr. Chairman, the Legion realizes that the Nation is facing some rather striking economic challenges. The industrial base of the United States is confronting more efficient foreign competition with substantially lower labor costs, and is frequently not competitive on either foreign or domestic markets. Rising unemployment has given life and sustenance to a much stronger protectionist sentiment and a burgeoning peace movement. Many say that a clear need exists to retrench, to spend less on defense and more on social programs, and to insure that U.S. industry is protected from foreign competition.

We can ill afford to revert to the fortress America attitude which existed after World War II. Implementation of such beliefs would result in a weak foreign policy, an erosion of world trade, a serious contraction of this Nation's economy, and worsening of the world economic situation.

An inward looking America would no longer have the concern or the ability to protect its foreign interests. This must not happen. The United States, like it or not, is the leader of the free world. We must compete with a belligerent, totalitarian military power that governs by force of arms, and that will continue to threaten our national interests and way of life. To continue to compete without resorting to armed conflict, we must as a nation remain strong.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Olszewski follows:]

## Statement of

# The American Legion

by

ALAN M. OLSZEWSKI, ASSISTANT DIRECTOR
NATIONAL LEGISLATIVE COMMISSION
THE AMERICAN LEGION

and

JAMES HUBBARD, DEPUTY DIRECTOR
NATIONAL SECURITY/FOREIGN RELATIONS COMMISSION
THE AMERICAN LEGION

Mr. Chairman, The American Legion is pleased to once again be provided the opportunity to share with you the concerns of our membership on the Fiscal Year 1984 Defense Budget. At the outset, it must be emphasized that the United States really has no choice except to spend what is necessary to protect its national interests. The hard part, of course, is determining "what is necessary." However, accepting undue and unnecessary risks would ultimately result in the world-wide erosion of freedom and democracy and control by unfriendly governments of the world's natural resources on which our prosperity depends. A dramatic redirection of the American way of life would result--a redirection which is totally unacceptable to the 2.6 million members of The American Legion.

Also, it is important to recognize that the annual debate over the defense budget is really a debate of national will, a debate of how far we are willing to go in terms of the allocation of taxpayers dollars to ensure the continuation of our way of life on this continent, and how best to encourage the spread of democracy elsewhere in the world.

Further, we would caution against the propensity to defer procurement of modern weapons systems in favor of newer, more expensive systems to be deployed sometime in the future. Debate is now occuring in this area concerning the B-1 bomber in favor of stealth technology, and will shortly get underway on the M-X versus the proposed single warhead missile advocated by the recent Presidential

Commission. The Legion firmly believes that this nation cannot deter war and ensure peace with vast collections of engineering drawings on new systems and old, marginally capable weapons designed and deployed decades ago. We need to modernize now.

With the above in mind, we would like to focus our discussion today on three areas of concern.

First, the M-X missile, or more generally, the proposals offered by the President's Commission on Strategic Forces. The Commission stressed that all recommendations must be taken together, and that no single recommendation was an acceptable separate solution.

It is useful at this point to quote from the Commission Report:

> "The Commission has concluded that the preferred approach for modernizing our ICBM force seems to have three components: initiating engineering design of a single warhead small ICBM, to reduce target value and permit flexibility in basing for better long-term survivability; seeking arms control agreements designed to enhance strategic stability; and deploying MX missiles in existing silos now to satisfy the immediate needs of our ICBM force and to aid that transition......
>
> "In the meantime, however, deployment of MX is essential in order to remove the Soviet advantage in ICBM capability and to help deter the threat of conventional or limited nuclear attacks on the alliance. Such deployment is also necessary to encourage the Soviets to move toward the more stable regime of deployments and arms control outlined above.
>
> "The Commission stresses that these two aspects of ICBM modernization and this approach toward arms control are integrally related. They point toward the same objective--permitting the U.S. and encouraging the Soviets to move toward more stable ICBM deployments over time in a way that is consistent with arms control agreements having the objective of reducing the risk of war. The Commission is unanimous that no one part of the proposed program can accomplish this alone."

Mr. Chairman, The American Legion supports this conclusion of the President's Commission on Strategic Forces. We have long believed that the only way to bring the Soviets to the bargaining table to discuss meaningful arms control is to show them that their unwillingness to bargain will not be met with unilateral disarmament but with ever-growing American strength and determination.

In the past several years, the Soviets have deployed more than 600 new ICBMs equivalent in size to the M-X or larger, thus gaining a significant advantage in these large land-based, highly accurate missiles. In our view, an arms control agreement which does not provide for the reduction in numbers of these systems will not enhance United States security.

Deployment of 100 M-X missiles in existing silos will demonstrate to the Soviets that we do not intend to concede many years of Soviet advantage in these highly accurate systems. The committee is reminded that the only thing which has brought the Soviets to the bargaining table on the anti-ballistic missile treaty in the past was our continued development of an ABM system and finally, the decision to deploy such a system. It is unwise to think that the Soviets will agree to meaningful arms control and reductions if we unilaterally kill the only modernization program currently underway. The M-X would give the United States its only new ICBM in this decade, and at the same time enhance the chances for meaningful arms reduction, and make the quest for peace a little less onerous.

It is useful at this point to examine a quote from the separate statement of former Secretary of Defense Harold Brown, a consultant to the President's Commission:

> "Recall that we said in the early 1970s that we would modernize with a new missile in the late 1970s. In the mid-1970s, we said that we would do so in the early 1980s, and in the late 1970s that we would in the mid-1980s. We have failed so far to do any of those things, even while the Soviets were deploying over 600 new ICBMs, each with a payload equal to or greater than that of MX, and with accuracies now matching those of the most accurate U.S. ICBMs.

> "To say that the United States will modernize in the early 1990s with a small single-warhead missile will just not be believable. The Soviets would be justified in calculating that any new U.S. ICBM system will be aborted by some combination of environmental, doctrinal, fiscal, and political problems."

Our second area of concern, Mr. Chairman, is the Administration's request for $6.1 billion for procurement of the B-1B bomber. The bomber is the only leg of the Triad which can be launched prior to a decision to employ strategic weapons, providing the National Command Authority the greatest degree of latitude in the decision making process during a time of crisis. The launch of weapons carrying aircraft can signal national resolve during a critical period with a high degree of confidence that crews can be redirected or recalled as the situation develops. Manned bombers provide the only method of engaging unanticipated or mobile targets by using the crew and on-board sensors to determine the location of the proposed target at the time of delivery. They are also a useful and important supplement to the Navy for such missions as long-range sea surveillance, ship attack and mine-laying.

The B-1B will be fully capable of penetrating the Soviet Union well into the 1990s. This will allow designated B-52s to be employed for the cruise missile carriage mission. To keep the B-52s as a viable penetrating weapon system over the next decade and beyond would require numerous expensive modifications. As these airframes age, their operation and maintenance costs grow at an increasing rate. Therefore, the timely retirement of some of these airframes will result in a substantial cost savings. Should the B-1Bs capability to penetrate decline in the face of growing Soviet defensive efforts, it will be able to function as a very effective cruise missile carrier and conventional weapon system. In view of developments in Stealth technology, the acquisition of penetrating advanced technology bombers should start in the 1990s. The B-1B would be even more important if current expectations in regard to advanced technology bombers don't materialize.

Soviet advances in air defense, and to a lesser degree in offensive weapons, will make the current bomber force increasingly vulnerable. Soviet deployments of AWACS-type airplanes, "look down, shoot-down" fighters, and monopulse radars--

all in large numbers--will severely tax the ability of the B-52 force to penetrate and destroy critical targets by the late 1980s.

For these reasons, Mr. Chairman, it is imperative that we modernize the bomber force now rather than wait for some future developments.

Our third area of concern is operations and maintenance funding for FY 1984. The Legion is well aware of Congressional sentiment to cut the defense budget. As you know, cutting procurement saves very little in outlays for the current fiscal year. Reducing personnel sends the wrong signal to the other side, and at the same time, increases the reliance on the strategic nuclear forces thereby lowering the nuclear threshold and increasing the danger of an exchange. The only other area where cost savings can be realized is Operations and Maintenance.

To understand the significance of Operations and Maintenance funding (O&M), one must carefully analyze the relationship of such funding to readiness. This funding impacts directly on the day-to-day operations of every unit commander at every level of command. It is no secret that O&M is the life blood of military readiness. Without a stready stream of spare parts, neither equipment nor weapons systems can be relied upon to perform when needed.

Moreover, it may be advanced that O&M funding has risen dramatically over the years, but just as with every other segment of our economy this is attributable primarily to spiraling fuel costs. However, denial of adequate fuel for regular operation of our weapons systems can only be expected to compromise the readiness of the professions on whom our defense rely.

Also, we must recognize that one's work environment plays a major part in career decision making. Boiler technicians forced to work much longer hours due to reduced manning will not remain in the service. Airframe and electronics technicians forced to work nights and weekends due to reduced manning will leave the service. Equipment mechanics, unable to obtain spare parts for the vehicles and aircraft they are charged with maintaining, will rapidly develop an "I don't care" attitude once they perceive that the parts are not available due to funding constraints. Nothing more directly affects a fighter pilot's morale than reducing his flying hours to conserve fuel when, in fact, he is deeply aware that those hours flown are barely maintaining his flying proficiency and minimal safety standards.

In acknowledging what most recognize as the obvious, we must further consider the value O&M funds have on morale and personnel retention. A fighting force's high morale is achieved when individual self-confidence merges and peaks with confidence in one's equipment; confidence reached through daily training and exercises.

The finely honed edge of military preparedness is finally mastered when these two elements of confidence have been achieved and demonstrated by individuals who accomplish in training what they believe will be expected of them in combat. All this is done with O&M funds. We cannot afford to under-estimate the factors of morale and confidence in self and equipment when discussing the retention of highly qualified people. The American Legion urges you to resist the temptation to take any short curts by reducing O&M funds through a perception of greater need elsewhere.

To summarize, Mr. Chairman, the Legion realizes that the nation is facing some rather striking economic challenges. The industrial base of the U.S. is confronting more efficient foreign competition with substantially lower labor costs, and is frequently not competitive on either foreign or domestic markets. Rising unemployment has given life and sustenance to a much stronger protectionist sentiment, and a burgeoning peace movement. Many say that a clear need exists to retrench, to spend less on defense and more on social programs, and to ensure that U.S. industry is protected from foreign competition.

We can ill afford to revert to the fortress America attitude which existed after World War II. Implementation of such beliefs would result in a weak foreign policy, an erosion of world trade, a serious contraction of this nation's economy, and worsening of the world economic situation. An inward looking America would no longer have the concern or the ability to protect its foreign interests. Freedom and democracy would suffer as unfriendly socialist dictatorships inherited the natural resources on which the free world economy depends. U.S. foreign policy and the defense establishment needed to back it up would weaken and the armed forces would decline in size and ability. This must not happen. The United States, like it or not, is the leader of the free world. We must compete with a belligerent, totalitarian military power that governs by force of arms, and that will continue to threaten our national interests and way of life. To continue to compete without resorting to armed conflict, we must as a nation remain strong.

The 64th Annual National Convention of The American Legion held last August in Chicago, Illinois passed 18 resolutions relating to the national security of the United States. Copies of the full texts of the resolutions are appended to this statement and the rationale for The American Legion's support for each position is contained therein. We respectfully request that they be included in the hearing record. Numbers and titles follow:

| Resolution Number | Title |
|---|---|
| 265 | Strategic Nuclear Policy |
| 491 | National Defense |
| 32 | Space-Based Ballistic Missile Defense System |
| 269 | Modernization of U.S. Air Force |
| 272 | Aerial Refueling Capability/KC-135 Tanker Aircraft |
| 274 | M-X Missile |
| 275 | Airborne Warning and Control Systems Program |
| 335 | A-10 Aircraft |
| 336 | Tactical Aircraft |
| 338 | Triad Concept and Stealth Aircraft |
| 339 | Airlift Capability |
| 468 | B-1 Bombers & Advanced Technology Bomber (ATB) |
| 147 | Support Total Force Policy |
| 150 | Strategic Mobility Improvements |
| 354 | U.S. Armed Forces Quality of Life Aspects |
| 471 | Rapid Deployment Forces |
| 487 | Support for a Strong National Guard |
| 517 | Opposition to Erosion of Benefits for Members of the United States Armed Forces |

Thank you, Mr. Chairman.

64th NATIONAL CONVENTION OF THE AMERICAN LEGION
HELD IN CHICAGO, ILLINOIS
AUGUST 24-26, 1982

RESOLUTION 265

COMMITTEE: National Security

SUBJECT: STRATEGIC NUCLEAR POLICY

WHEREAS, the United States has considered that nuclear war would essentially spell the destruction of civilization; a view which led us in the 1960s and 1970s to accept a steady erosion of our military strategic strength through successive enunciated policies which have only confirmed our diminishing relative strength; and

WHEREAS, the continued acceptance of such a policy would lead us to a position of inferior strategic strength, vis-a-vis the Soviet Union, by the mid-'80s; and

WHEREAS, a strategic policy which would hold our own citizens hostage to nuclear exchange in order to deter aggression lacks credibility because of the Soviet's recently developed more accurate and more powerful MIRVed ICBMs, having first strike capability; and

WHEREAS, the Soviet Union strategists have long developed their military war machine from the concept of "winning" a nuclear war; and

WHEREAS, in developing their strategic nuclear offensive capability, the Soviets have emphasized their Intercontinental Ballistic Missiles (ICBMs), and have been modernizing that force, stressing improved readiness, greater throw-weight, increase accuracy, better command and control; and

WHEREAS, they have also increased the number of re-entry vehicles and provided hardened silos to improve survivability; and

WHEREAS, there is evidence from the budgets submitted to the Congress that the Administration is attempting to provide our Armed Forces with improved strategic capabilities to counter the Soviet advances; and

WHEREAS, the development of new capabilities and rapid deployment of Anti-Ballistic Missiles (ABMs) including laser and other scientific break throughs, would enhance the survivability of our ICBMs, strategic bomber bases, defense communication sites, military facilities and the civilian populance; and

WHEREAS, at the present time, the U.S. has no effective defense against an attack by Soviet strategic aircraft; and

WHEREAS, the improvement of our manned and unmanned capability to intercept and destroy Soviet aircraft and cruise missiles would appreciably add to the deterrence of enemy attack; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Chicago, Illinois, August 24-26, 1982, that we pursue a new strategic nuclear policy which will lead the U.S. to develop the needed strength to destroy Soviet strategic offensive capabilities, rather than the destruction of soft targets; and, be it further

RESOLVED, that together with the development of these new capabilities that the United States develop the force structure necessary to defeat the Soviet Union, while minimizing destruction to the United States.

64th NATIONAL CONVENTION OF THE AMERICAN LEGION
HELD IN CHICAGO, ILLINOIS
AUGUST 24-26, 1982

RESOLUTION 491

COMMITTEE: National Security

SUBJECT: NATIONAL DEFENSE

WHEREAS, various reports by our elected officials indicate our deficiences in our national military posture; and

WHEREAS, Congress has become aware of this problem, and has increased the 1982-83 defense budget in an effort to better our military stature before other nations; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Chicago, Illinois, August 24-26, 1982, that we commend those Members of Congress who are attempting to improve our military preparedness; and, be it further

RESOLVED, that we urge Congress to continue their efforts to bring our national military strength, and hardware of men and materials to the position that our nation be number one, and that our people will not have to live in fear of any sudden attack without the ability to retaliate.

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64th NATIONAL CONVENTION OF THE AMERICAN LEGION
HELD IN CHICAGO, ILLINOIS
AUGUST 24-26, 1982

RESOLUTION 32

COMMITTEE: National Security

SUBJECT: SPACE-BASED BALLISTIC MISSILE DEFENSE SYSTEM

WHEREAS, The American Legion has urged the Administration and the Congress to conduct a comprehensive review of the defense program of the United States and develop and implement a program with significant real annual budget increases to assure the security of the nation and the support of its foreign policy; and

WHEREAS, the President has announced a comprehensive plan for the modernization of U.S. strategic weapons, making clear what the United States will do to strength its strategic posture if fair and equitable agreements for arms reduction cannot be reached; and

WHEREAS, the comprehensive plan includes a commitment to upgrade our electronic command and control systems and to accelerate research and development aimed at devising an effective anti-ballistic missile defense system; and

WHEREAS, it has been reported that the Soviet Union may be prepared to deploy laser beam type weapons in space in this decade and to have a large, permanent, manned orbital space complex capable of attacking land, sea and air targets operational in the next decade; and

WHEREAS, the United States currently has a technological lead over the Soviet Union, especially in space as demonstrated by the Space Shuttle, and should be making much greater use of the opportunities open to us for peaceful scientific, industrial and commercial applications of space as well as harnessing its military potential; and

WHEREAS, it may not be possible for the U.S. to continue to budget unlimited amounts in an effort to match the enemy's capabilities in all types of forces and weapons, and because there is a growing popular demand for a reduction in strategic nuclear weapons; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Chicago, Illinois, August 24-26, 1982, that we urge the President and Congress to adopt a new military strategy which would take advantage of available and developing space technology, assure that the United States maintains the lead in such technology, and would provide for developing a space-based ballistic missile defense system.

# 64th NATIONAL CONVENTION OF THE AMERICAN LEGION
# HELD IN CHICAGO, ILLINOIS
# AUGUST 24-26, 1982

## RESOLUTION 269

COMMITTEE: National Security

SUBJECT: MODERNIZATION OF U.S. AIR FORCE

WHEREAS, every major conflict since World War I has demonstrated the need for air superiority in order to conduct successful ground combat against an armed hostile force; and

WHEREAS, the Soviet Union now possesses the requisite number of aircraft to potentially deny air superiority to the United States in an armed conflict involving those two nations; and

WHEREAS, Soviet use of air power has allowed them to challenge U.S. influence in areas of the world most critical to the security of the United States; and

WHEREAS, our national survival and the security of our allies depend on the ability of the U.S. to maintain air superiority in order to foster the strategic airlift capability, the close air support capability, and the strategic combat capability of the U.S. Air Force; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Chicago, Illinois, August 24-26, 1982, that we urge the Administration and the Congress to act immediately to provide the necessary funding to modernize the U.S. Air Force in order to maintain the most up-to-date equipment available for close air support capability, strategic airlift and air superiority roles assigned as the Air Force mission.

64th NATIONAL CONVENTION OF THE AMERICAN LEGION
HELD IN CHICAGO, ILLINOIS
AUGUST 24-26, 1982

RESOLUTION 272

COMMITTEE: National Security

SUBJECT: AERIAL REFUELING CAPABILITY/KC-135 TANKER AIRCRAFT

WHEREAS, various Air Force analyses show that additional aerial refueling capability is needed for optimum bomber penetration routes to support the Single Integrated Operational Plan (SIOP); and

WHEREAS, the requirement for tanker support will increase when the B-52Gs begin to carry Air Launched Cruise Missiles (ALCMs) externally; and

WHEREAS, this strategic planning problem is compounded by the requirement to refuel airlift and tactical aircraft for contingency operations; i.e.,NATO, Mid-East; and

WHEREAS, present aerial refueling requirements for combined SIOP and contingency missions exceed the current capabilities to such an extent that during simultaneous operations these missions would be seriously degraded due to tanker deficiencies; and

WHEREAS, there are various operational and environmental problems with the KC-135 as currently engined, including limited thrust and fuel offload capabilities, excessive engine noise, chronic take-off thrust problems and gaseious emissions; and

WHEREAS, recent evidence also shows water requirements would be a problem for those KC-135s involved with operations in scarce water areas, such as the Mid-East; and

WHEREAS, re-engining the KC-135 with the CFM-56 engine will increase fuel offload capabilities at all refueling ranges, improve engine thrust, reduce basing constraints, and save 180,000 gallons of fuel per aircraft per year; and

WHEREAS, the re-engined KC-135 is six times quieter and substantially less polluting than the current KC-135A; and

WHEREAS, the Air Force objective is to provide an acceptable level of refueling support to strategic bombers, tactical fighters and long-range strategic transports across a range of possible scenarios and, in view of political realties and uncertainties, plans must be made to provide this refueling support without enroute basing; and

WHEREAS, our air refueling force must be able to respond to Administration concerns for a global response capability and the ability to support a protracted conflict; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Chicago, Illinois, August 24-26, 1982, that we urge the Administration and Congress to support the Air Force program to re-engine its KC-135 tanker force with new, quieter, fuel efficient engines which will provide the capability in the years ahead to meet the refueling requirements of our strategic, tactical and airlift forces.

64th NATIONAL CONVENTION OF THE AMERICAN LEGION
HELD IN CHICAGO, ILLINOIS
AUGUST 24-26, 1982

RESOLUTION 274

COMMITTEE: National Security

SUBJECT: M-X MISSILE

WHEREAS, the land-based Intercontinental Ballistic Missile (ICBM) is a cornerstone of our national strategic deterrent; and

WHEREAS, under the provisions of the interim SALT agreement, Soviet strategic forces are numerically superior to those of the United States and the Soviets deploy three times the missile throw-weight of comparable U.S. forces; and

WHEREAS, the Soviet Union has initiated new ICBM programs representing a massive effort in the form of new missiles, new bus-type dispensing systems, new Multiple Independent Targetable Re-entry Vehicle (MIRV) payloads, new guidance systems, new type silos, new launch techniques and probably new warheads; and

WHEREAS, all available evidence suggests that targeting our ICBM silos continues to be high priority for the Soviet ICBM force; and

WHEREAS, in first strike capability by the Soviet Union would destroy the balance of strategic weapons between us; and

WHEREAS, a Secretary of Defense has stated that "reducing the vulnerability of the land-based ICBM force is the highest priority strategic initiative in the Department of Defense five-year program;" and

WHEREAS, the Air Force has undertaken programs to improve the accuracy yield and survivability of its Minuteman missiles including improved guidance and propulsion, Mark 12A increase the warhead yield and hardening of the silos; and

WHEREAS, in the long run, the M-X missile provides the most promising ICBM initiative for preserving essential equivalence; and

WHEREAS, survivability is a dominant concern in the update of our Intercontinental Ballistic Missile program; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Chicago, Illinois, August 24-26, 1982, that the Administration and the Department of Defense arrive at an early date on basing mode offering the greatest possibility of survival; and, be it further

RESOLVED, that the Administration and the Congress be urged to provide full support to Defense Department efforts to develop and deploy the M-X missile as expeditiously as possible to insure that the U.S. does not allow the Soviet Union to achieve a position of strategic superiority inimicable to our national security interests.

64th NATIONAL CONVENTION OF THE AMERICAN LEGION
HELD IN CHICAGO, ILLINOIS
AUGUST 24-26, 1982

RESOLUTION 275

COMMITTEE: National Security

SUBJECT: AIRBORNE WARNING AND CONTROL SYSTEMS PROGRAM

WHEREAS, future demands on our surveillance, warning and control capabilities in support of tactical air operations, particularly in the context of a European conflict, will be quite severe; and

WHEREAS, an AWACs system has been developed by the U.S. Air Force consisting of an advanced radar system mounted in a Boeing 707 E-3A aircraft with associated data processing and communication equipment; and

WHEREAS, the fundamental requirement for AWACs is driven by the rapidly growing ability of Soviet built aircraft to penetrate defenses at very low altitudes, screened from the view of ground radar systems; and

WHEREAS, flight demonstrations in Europe, as well as in the United States, have confirmed the ability of AWACs to inter-operate with the NATO air defense system and to provide unprecedented long-range airborne surveillance and warning that are vital for credible deterrence in peacetime and for precise control of forces engaged in combat in the event of conflict; and

WHEREAS, the AWACs can be deployed to any region of the world, and immediately begin its mission of surveillance, warning or direction of air-to-air or air-to-surface combat operations and its inherent mobility, coupled with its long-range enabling it to perform its mission while remaining outside the threat area of enemy surface-to-air missiles or fighter aircraft; and

WHEREAS, the view provided decision makers by AWACs of the battle area and the collection and dissemination of on-time data such as position and track information on enemy aircraft and ships and the location and status of friendly ground troops will improve by order of magnitude the centralized, timely management of national assets; and

WHEREAS, complementing our national AWACs program is our planned participation in the proposed NATO AWACs program, the largest, single commonly funded project ever undertaken by NATO; and

WHEREAS, the AWACs will also be an essential element of our air defense system in the U.S.—a role which has acquired even greater significance in view of the new Soviet supersonic bomber, the Backfire, and the long-term reduction in size of our dedicated air defense interceptor force; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Chicago, Illinois, August 24-26, 1982, that we urge the Administration and the Congress to continue to support the U.S. Air Force and its efforts to procure a sufficient number of AWACs to meet national defense requirements now and in the future.

64th NATIONAL CONVENTION OF THE AMERICAN LEGION
HELD IN CHICAGO, ILLINOIS
AUGUST 24-26, 1982

RESOLUTION 335

COMMITTEE: National Security

SUBJECT: A-10 AIRCRAFT

WHEREAS, Soviet strategy in Europe calls for around-the-clock operations designed to cause the quick collapse of NATO forces; and

WHEREAS, the Soviets, in open writings, say they intend to seize the initiative early; and

WHEREAS, with NATO forces in defensive positions, we can expect the Soviets to launch a classic breakthrough attack to establish their preferred form of combat--a war of movement; and

WHEREAS, by combining mobility and massive firepower, the Soviets intend to keep NATO forces off balance and confused; and

WHEREAS, the A-10 aircraft is especially suited to blunting such an attack and providing capabilities to delay and disrupt the Warsaw Pact forces; and

WHEREAS, the projected deficiency in close support aircraft cannot be remedied by diversion of high performance fighter aircraft from the very important air superiority role due to the high speed and sink rate of these airplanes, even though equipped with stand-off weaponry; and

WHEREAS, the A-10 aircraft has a rapid firing gun which is very effective against hard mobile targets, such as tanks, and can carry a full range of conventional ordnance, and with its GAW-S 30mm cannon and Maverick air-to-surface missiles, the A-10 aircraft is the most lethal anti-armor weapon system available; and

WHEREAS, its reliability and maintainability have exceeded Air Force expectations, and squadrons assigned to USAFE have successfully operated from forward operating locations in the Federal Republic of Germany; and

WHEREAS, hundreds of thousands of operational flight hours and joint tests with the Army have demonstrated the outstanding capabilities of this aircraft to perform close air support; and

WHEREAS, the outstanding capabilities of this aircraft will further be enhanced through modification of a two-seat configuration which can serve as a combat-ready trainer, resulting in savings both in fuel and training costs of several millions of dollars per year; and

WHEREAS, the two-seat A-10 could also be equipped to accept avionics to perform the night weather ground attack missions, thus preserving the near term option for that mission; and

WHEREAS, the Air Force has already introduced new A-10s directly into Reserve forces to accelerate total force modernization; now, therefore, be it

# 64th NATIONAL CONVENTION OF THE AMERICAN LEGION
# HELD IN CHICAGO, ILLINOIS
# AUGUST 24-26, 1982

## RESOLUTION 336

**COMMITTEE:** National Security

**SUBJECT:** TACTICAL AIRCRAFT

WHEREAS, for the United States to be capable of protecting its world-wide interests, we must be able to respond with military power when our interests, or those of our allies, are threatened and military force is deemed appropriate; and

WHEREAS, the erosion of our strategic nuclear superiority has reduced the deterrent value of the nuclear umbrella as well as increased the reliance upon and the contribution of conventional forces to our over-all deterrent strength; and

WHEREAS, the primary threat to our general purpose forces continues to be the Soviet Union Warsaw Pact; and

WHEREAS, the continued rapid introduction and production by the Soviets of new, more modern and sophisticated tactical systems may soon have us facing a force that is not only vastly superior numerically, but one that is comparable qualitatively; and

WHEREAS, the most demanding conventional threat facing the United States is an armored attack on Western Europe by the Warsaw Pact; and

WHEREAS, NATO plans rely heavily on the flexibility of tactical air power to be able to shift combat power rapidly to threatened sectors; and

WHEREAS, our tactical Air Force must not only aid in blunting an attack along the forward line, but must provide the capability to delay, disrupt and destroy enemy reinforcements and resupply; and

WHEREAS, since only a limited number of tactical aircraft may be deployed during early critical phases of a contingency, it is essential that they represent the best our country can field in order to signal our determined resolve to end the conflict on terms favorable to the United States; and

WHEREAS, the national requirement demands the flexibility and capabilities provided only tactical fighters possessing superior performance, fire control systems, and armaments; and

WHEREAS, it is imperative, therefore, that the United States maximize the capabilities of the forces that are programmed and to build upon those forces to deter a present, ever-growing threat; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Chicago, Illinois, August 24-26, 1982, that we strongly urge the Administration and the Congress to fully support the Air Force efforts to increase the production rates and capabilities of our tactical aircraft so that older, less capable aircraft in our Active and Reserve units may be replaced as quickly as possible.

64th NATIONAL CONVENTION OF THE AMERICAN LEGION
HELD IN CHICAGO, ILLINOIS
AUGUST 24-26, 1982

RESOLUTION 338

COMMITTEE: National Security

SUBJECT: TRIAD CONCEPT AND STEALTH AIRCRAFT

WHEREAS, The American Legion has consistently supported the TRIAD concept of strategic deterrence which is based upon the mutual support provided each of the three elements thereof, i.e., submarine launched ballistic missiles, intercontinential land-based ballistic missiles, and penetrating strategic bombers, by the other elements; and

WHEREAS, for several years The American Legion has supported Air Force efforts to develop and deploy non-long range combat aircraft to replace part of the B-52 force which is 20-30 years old, which will be incapable of penetrating the sophisticated defenses expected to be in place in the Soviet Union in future years; and

WHEREAS, Congress has directed the Department of Defense to vigorously pursue full scale engineering development of a long-range combat aircraft maximizing range, payload and the ability to perform the missions of a conventional bomber, cruise missile launch platform, and nuclear weapons delivery system in both the tactical and strategic role with an initial operational capability of not later than 1987; and

WHEREAS, the Air Force has recommended that B-1B aircraft be procured to fulfill this requirement in the near-term, followed by a second bomber force of advanced technology bombers in the 1990s; and

WHEREAS, the strength of a long-range combat aircraft lies in its inherent flexibility, being much more than a penetrating aircraft in the traditional single integrated operational plan role, possessing in addition through its on-board offensive system, the capability of detecting, identifying, and attacking mobile targets as well as imprecisely located targets; and

WHEREAS, the aircraft's range, payload, and advanced avionics, would also substantially enhance collateral support for the U.S. Navy in sea surveillance and surface attack; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Chicago, Illinois, August 24-26, 1982, that we urge the Administration and Congress to act as expeditiously as possible to provide full support to the Air Force in its effort to develop and deploy modern long-range combat aircraft in sufficient numbers at an early date so as to insure the effectiveness of the bomber element of the TRIAD; and, be it further

RESOLVED, that we also urge the Administration and the Congress to act as expeditiously as possible to support the development and deployment of an advanced technology bomber to meet our defense requirements.

64th NATIONAL CONVENTION OF THE AMERICAN LEGION
HELD IN CHICAGO, ILLINOIS

AUGUST 24-26, 1982

RESOLUTION 339

COMMITTEE: National Security

SUBJECT: AIRLIFT CAPABILITY

WHEREAS, rapid reinforcement and world-wide mobility are major elements of the defense policy of the United States; and

WHEREAS, rapid mobility is essential to deterrence and it is imperative that the total mobilization airlift capability of the United States be maintained at a level to allow for rapid deployment of the armed forces of the United States in a time of need; and

WHEREAS, current airlift deficiency is judged to be the greatest problem the U.S. Air Force faces in executing national military strategy; and

WHEREAS, the Secretary and Chief of Staff of the U.S. Air Force have testified that the procurement of additional out-size cargo airlift capability is a top priority of the Air Force in the mobility area and is essential to their needs; and

WHEREAS, the availability of such additional capability is essential to rapid reinforcement and world-wide mobility of the armed forces of the United States; and

WHEREAS, the Congressionally Mandated Mobility Study affirmed this short-fall in airlift capability; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Chicago, Illinois, August 24-26, 1982, that we urge the Congress of the United States to authorize funds to insure that sufficient airlift capability will be available in future years to provide for rapid development of the armed forces of the United States if it becomes necessary to prevent infringement upon the vital interests of the United States anywhere in the world by any potential aggressor.

64th NATIONAL CONVENTION OF THE AMERICAN LEGION
HELD IN CHICAGO, ILLINOIS

AUGUST 24-26, 1982

RESOLUTION 468

COMMITTEE: National Security

SUBJECT: B-1 BOMBER AND ADVANCED TECHNOLOGY BOMBER (ATB)

WHEREAS, over the past several decades, the modernization of U.S. strategic forces has not kept pace with the relentless growth of Soviet nuclear capabilities, our deterrent posture has eroded so that we now face a formidable challenge; and

WHEREAS, an announced comprehensive plan for modernizing our strategic forces includes production of the B-1 bomber in the 1980s while we pursue vigorous development of an advanced technology bomber (ATB) Stealth aircraft for deployment during the 1990s; and

WHEREAS, the cost of maintaining the aging B-52s through the 1990s to the year 2000, including the modifications and essential improvements, would exceed the entire cost of the B-1 program; and

WHEREAS, the B-1 bomber is strategically not just an interim bomber, but a highly versatile aircraft that can function well into the 21st century, and when the Stealth is deployed, can then serve as cruise missile carriers, replacing the B-52s; and

WHEREAS, the Department of Defense stated that the B-1 can be built for the projected cost of $21.5 billion because the engineering is complete, the design is mature and tested, and the basic plane has undergone almost 2000 hours of highly successful flight testing; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Chicago, Illinois, August 24-26, 1982, that we support the President's decision to produce the B-1 bomber now, followed by eventual introduction of the ATB, because it is a militarily sound and cost-effective contribution to our nation's strategic force modernization program to improve our nuclear deterrent posture

64th NATIONAL CONVENTION OF THE AMERICAN LEGION
HELD IN CHICAGO, ILLINOIS
AUGUST 24-26, 1982

RESOLUTION 147

COMMITTEE: National Security

SUBJECT: SUPPORT TOTAL FORCE POLICY

WHEREAS, the Reserve component accounts for more than 40% of the Army's total military strength; the Army's National Guard provided one-third of the total number of the Army's combat divisions while two-thirds of the Army's combat service support capability is found in the Army Reserve; and

WHEREAS, today's Reserve components are an integral and essential part of the Total Force and must be capable of performing wartime missions from the outset of hostilities; and

WHEREAS, the ultimate goal is to have sufficient personnel to man Reserve and National Guard and sufficient equipment for these units at authorized wartime levels; and

WHEREAS, the DOD Reserve Forces Policy Board has issued a report entitled "The Reserve Forces in the 1990s" which concluded that equipment needs in the Reserve and National Guard are serious and that if the Reserve and National Guard are to continue as a viable part of the Total Force, ready for early deployment in both the combat and support roles, then the concept of unitary equipment buys including sufficient spares, mirror image organization and identical equipage must be expanded and accelerated; and

WHEREAS, the National Guard and Reserve strength during the 1980-1990s is predicted to increase the force to authorized levels; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Chicago, Illinois, August 24-26, 1982, that we support the policy of the Total Force and urge the U.S. Congress to authorize and fund the National Guard and Reserve Forces to provide sufficient recruiting incentives so as to man units at authorized wartime levels; and, be it further

RESOLVED, that The American Legion believes the equipment available to the Guard/Reserve component of the Total Force must be increased in numbers, capability and compatibility with the Active Force, if the Guard/Reserve is to be expected to fulfill its assigned mission as a full partner of the Total Force; therefore, we urge the Congress to authorize and fund the Guard/Reserve so that they may fully accomplish their mission in the event of war.

# 64th NATIONAL CONVENTION OF THE AMERICAN LEGION
HELD IN CHICAGO, ILLINOIS
AUGUST 24-26, 1982

RESOLUTION 150

COMMITTEE: National Security

SUBJECT: STRATEGIC MOBILITY IMPROVEMENTS

WHEREAS, U.S. strategic mobility forces are currently unable to meet NATO reinforcement objectives or to project credible United States forces to areas where our national interests may be threatened; and

WHEREAS, the Army's prepositioned equipment and war reserve stocks are inadequate for many contingencies; therefore, mobility forces, both air and sea, must be increased to provide flexible power projection; and

WHEREAS, the planned conversion of eight Navy SL-7 container ships to roll-on, roll-off (RO/RO) configuration is essential and a high priority must be given to research and development programs for surface effect ships, which will project forces rapidly and complement air-lifted forces in the future; and

WHEREAS, prepositioning material configured to unit sets (POMCUS) remains a key part of the strategic mobility picture, critical shortages still exist in this area; and

WHEREAS, the development of two intermediate staging sites in the Persian Gulf region is essential to improve the infrastructure for the Rapid Deployment Joint Task Force because no combat force can perform its mission if it is not at the right place, at the right time, with the right material; now, therefore be it

RESOLVED, by The American Legion in National Convention assembled in Chicago, Illinois, August 24-26, 1982, that we strongly urge the Congress to authorize and appropriate sufficient funds to provide the U.S. Army strategic mobility improvements.

64th NATIONAL CONVENTION OF THE AMERICAN LEGION
HELD IN CHICAGO, ILLINOIS
AUGUST 24-26, 1982

RESOLUTION 354

COMMITTEE: National Security

SUBJECT: U.S. ARMED FORCES QUALITY OF LIFE ASPECTS

WHEREAS, quality of life issues have a direct impact on combat readiness and on the commitment of personnel to a career in the Armed Services and they also send a message to our citizens about the nation's respect for and appreciation of those citizens who serve to defend and preserve our way of life. The armed forces strength has always been its peopoe--their readiness, commitment to each other, and dedication to service and the nation in war and peace; and

WHEREAS, the Fiscal Year 1983 budget requests contains essential funding for family housing and recurring O&M funds for some backlogs of maintenance and improvement, particularly in Europe; however, this funding will not be sufficient to correct backlogs elsewhere now estimated at $1.7 billion; and

WHEREAS, the competency of the armed forces depends upon good people, good training, good equipment, and a good environment; these depend in part on the resources provided by Congress and the nation; and

WHEREAS, The American Legion supports quality of life improvements for our servicemen and women, be it dining facilities, family housing, safe child facilities, pay, commissaries, health care, or education assistance; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Chicago, Illinois, August 24-26, 1982, that we strongly urge the President, the Department of Defense and the U.S. Congress to provide sufficient funding to improve and maintain the quality of life aspects of our servicemen and women and their families for people are the armed forces greatest asset.

64th NATIONAL CONVENTION OF THE AMERICAN LEGION
HELD IN CHICAGO, ILLINOIS
AUGUST 24-26, 1982

RESOLUTION 471

COMMITTEE: National Security

SUBJECT: RAPID DEPLOYMENT FORCES

WHEREAS, the training of our Rapid Deployment Forces has increased but not sufficiently enough; and

WHEREAS, this improvement is taking place, a much greater effort must be made; and

WHEREAS, the development of this force should be under the best possible command and control; and

WHEREAS, the continued acceptance of present policy will lead us to a position of inferior strength; and

WHEREAS, the unrest and terrorist activities in the Western Hemisphere makes these forces very essential; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Chicago, Illinois, August 24-26, 1982, that we urge for greater training and development of our Rapid Deployment Forces.

# 64th NATIONAL CONVENTION OF THE AMERICAN LEGION
# HELD IN CHICAGO, ILLINOIS
# AUGUST 24-26, 1982

RESOLUTION 487

COMMITTEE: National Security

SUBJECT: SUPPORT FOR A STRONG NATIONAL GUARD

WHEREAS, in all our wars, the American people have found it necessary to rely extensively on citizen-soldiers; and

WHEREAS, we have never been able to maintain a sufficient military establishment in time of peace to meet the total national defense needs; and

WHEREAS, the employers and citizens of our communities have reason to trust and support a civilian-soldier defense program; and

WHEREAS, an incentive compensation plan for National Guard members should attract superior men and women to assure adequate force levels; and

WHEREAS, accreditation of National Guard training courses by state higher education institutions should assist recruitment efforts; and

WHEREAS, a modern fully equipped National Guard is able to serve the nation and states in time of emergency, national disaster, or civil disorder; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Chicago, Illinois, August 24-26, 1982, that we call upon the Congress and the various State legislatures to provide for the Army National Guard and the Air National Guard the necessary legislation and resources to insure effective personnel strength and equipment levels compatible with the regular Army and Air Force, thereby guaranteeing fulfillment of their obligations to the United States of America.

64th NATIONAL CONVENTION OF THE AMERICAN LEGION
HELD IN CHICAGO, ILLINOIS
AUGUST 24-26, 1982

RESOLUTION 517

COMMITTEE: National Security

SUBJECT: OPPOSITION TO EROSION OF BENEFITS FOR MEMBERS OF U.S. ARMED FORCES

WHEREAS, military professionals look for and have every right to expect dignity, job satisfaction, and the appreciation of the American people for their sacrifices that are part of military life; and

WHEREAS, the quickest way for the nation to lose the best and the brightest in its Armed Forces is by degrading, eroding and ignoring the value and purpose of military service and of national security; and

WHEREAS, many of the men and women serving their country in uniform perceive a continued erosion of promised benefits because of constant attacks on the military commissaries, compensation, retirement pay, etc., by influential and decisive elements of society; and

WHEREAS, removal of real or perceived benefits, regardless of reason, can and frequently does produce Service reaction out of proportion to the savings involved; and

WHEREAS, such presumed savings then become illusionary for two reasons: trained personnel who might have been motivated toward a career leave the Service at the first opportunity; and those who have chosen a military career feel that the government has broken faith with them; and

WHEREAS, the investment in recruiting, training and experience of all those lost may well exceed any savings originally contemplated; and

WHEREAS, the adverse impact on the morale of those remaining should be obvious and a cause for deep concern; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Chicago, Illinois, August 24-26, 1982, that we see a compelling cause for reaffirming our belief in our compassion for, and our unswerving commitment to, the "people" of our Armed Services, and we strongly urge the Administration, Congress and the American public to oppose any action that would increase the perception of erosion of benefits; and, be it further

RESOLVED, that The American Legion believes that a "Bill of Rights" should be enacted specifying the Benefits that accrue from military service, which provides that such benefits would only be changed or eliminated prospectively and changes would not apply to those already in service; and, be it finally

RESOLVED, that we urge the Congress to enact "Bill of Rights" legislation.

### WORK OF LEGISLATIVE COMMISSION

Senator **Rudman**. Thank you very much for your statement. The rest of your statement and your resolutions have been printed in the record.

Senator **Stevens**. I have been familiar with the work that the Legislative Commission has done for years, of course. I am a little surprised at your recommendation of the MX. Are you opposing the President's position on the MX, the Commission's recommendation?

Mr. **Hubbard**. Mr. Chairman, I am not aware of what the President said this morning. We were on our way up here. We support the conclusion of the President's Commission, however.

Senator **Stevens**. Thank you. I misunderstood.

Senator **Rudman**. Thank you very much.

Our next witness this morning is Mr. James M. Peirce, president of the National Federation of Federal Employees.

Is Mr. Peirce here?

[No response.]

Senator **Rudman**. Apparently not.

## National Democratic Policy Committee

### STATEMENT OF SUSAN KOKINDA, WASHINGTON REPRESENTATIVE, NATIONAL DEMOCRATIC POLICY COMMITTEE

### SPACE-BASED DIRECTED ENERGY WEAPON SYSTEM

Senator **Rudman**. Is Susan Kokinda, Washington representative of the National Democratic Policy Committee, here?

Ms. Kokinda, if you could please summarize your statement. Your statement will be printed in the record in full.

Ms. **Kokinda**. Thank you, Mr. Chairman. I will summarize the statement.

Thank you for the opportunity to testify at these very important hearings. A year ago I testified here representing the National Democratic Policy Committee and called for the United States to embark upon a crash program for the development and deployment of a space-based directed energy weapon system as a strategic defense system.

In the course of the intervening year, our political action committee has intervened in the freeze debate, proposing this as the real alternative to the freeze. That is, a policy of mutually assured survival, rather than merely freezing the MAD doctrine in place, which is what the freeze is doing.

We have conducted debates, we have collected petitions. I have sitting in my office a stack about this big of petitions collected from citizens around the country who see the potential of directed energy weapons systems as a strategic defense capability and who are also extraordinarily excited about the economic implications of these advanced technologies.

Happily, on March 23, in his historic address to the Nation, President Reagan announced the United States would pursue a doctrine of strategic defense and called for a scientific mobilization to accomplish that end. While it is true the President did not explicitly identify in his speech the advanced technologies of directed energy weapons systems, I think it has been made abundantly clear in both on and off the record background briefings by the National Security Council and by the Secretary of Defense that this is indeed what the President is talking about.

Last Wednesday, our organization participated in two events here in Washington which I think represent the extent of support in the country for this proposal, despite what the Harris poll would tell you, despite what the front page of the New York Times would tell you every day.

### CONFERENCE ON ENERGY WEAPONS SYSTEMS

We hosted a conference of 600 people on the promise of directed energy weapons systems, both the strategic and economic promise. The majority of those people were not technical people and they were not military people. They were average citizens. They represented some 25 States in the United States, who are taking it upon themselves to engage in this most important debate and to support the President's policy.

In the midst of that conference we had a rally on the east steps of the Capitol, that the press in its infinite wisdom chose not to report on, but it nonetheless did indicate the extent of support we feel exists in the American population for these proposals.

At the evening keynote of that conference, NDPC Advisory Council Chairman Lyndon LaRouche, who did advance our proposal a year ago, gave a speech, the highlights of which I would like to summarize because I feel they define both the strategic and the budgetary implications facing this subcommittee and the U.S. Congress at this point:

### STRATEGIC DEFENSE DOCTRINE

What the President did on March 23 in announcing the fact that the United States is moving toward a posture of strategic defense is in a sense irreversible. That is, the doctrine is irreversible. The Soviets will take us at our word. In fact, several days after the President's address there were very clear indications from the Soviet Union that their already accelerated program in directed energy research was being very much augmented and upgraded.

What can be forestalled, however, is the implementation of that doctrine, and we feel there is a danger from those in the U.S. Congress and elsewhere who would like to put the genie back in the bottle, if you will, to forestall the implementation of that strategic doctrine. The implications of that are very simple: The Soviets will have it and we will not.

As a result, we feel that it is extraordinarily important that this debate be given the utmost priority in discussion in the U.S. Congress and in the United States. Our estimates are that the Soviets are in the range of deploying a certain aspect of this kind of ABM system by the turn of this decade. In other words, we are not talking about something 20 years in the future. We could deploy the same, with the appropriate crash program in the United States.

My testimony indicates what the outlines of such a strategic ABM defense system would be. I do not think it is necessary to detail it, but I think it is necessary to stress once again that this is something we are talking about in some aspects 2 years down the road, in other aspects 5 to 7 years down the road. But in no way do the technologies constrain us to talking about something 20 years down the road. It is simply a question of U.S. commitment to do this.

### ECONOMIC IMPACT OF PROGRAM

The second aspect, besides the strategic implications of this, which I would like to point to because they are extraordinarily important, is the economic impact, because the first question on most people's mind, of course, was how do you pay for it. We are fighting over how do you even pay for strategic modernization at this point.

If this program is pursued on the appropriate broad-based Manhattan project kind of basis or, a more recent model, the NASA program, the Apollo effort we carried out in the 1970's, the program would pay for itself. The economic implications of a whole family of laser technologies that we are talking about are truly revolutionary in terms of their impact on the productivity of the U.S. economy.

We should spend between now and the end of the century on both the strategic and tactical weapons side of this program $1 trillion dollars. I would submit that that $1 trillion will not cost the U.S. economy 1 penny. In fact, it will pay for itself many times over, just as NASA paid for itself many times over.

In fact, it is only the kind of scientific-industrial mobilization that is implicit in the development of these kinds of systems which is going to get the U.S. economy out of the mess it is in at this point. Frankly, you can cut the budget all you want and it is not going to make a bit of difference. What has collapsed in the United States is our industrial base, and whether you cut a billion here or a billion there in terms of the U.S. budget is not going to give the kind of jump start that the economy needs at this point.

A development and deployment of these kinds of technologies, the spinoffs of these weapons systems is going to give the economy the kind of jump start that it needs to get going. In fact, in real terms that is the only basis we have for talking about our long-term strategic capabilities. It is the strength of our industrial economy.

Prior to March 23, I think we were on a track toward a postindustrial rubble heap. We can talk about strategic modernization all we want, frankly, but without industrial capabilities we were talking with no cards in our hands.

The implications of moving toward a Manhattan project of directed energy weapons systems, of augmenting our NASA effort, of getting our research and development back on track where it can be, would have the kind of effect on the U.S. economy we say with the industrial mobilization in 1939. And I would suggest, in terms of the perception of Congress, what Congress was willing to spend in 1940, once it understood the positive economic implications of the industrial mobilization, was quite different from what Congress was even considering spending in 1938.

I think we are in a very similar situation. What sounds completely off the wall today in terms of a $1 trillion package over the next 17 years is going to be what is very clearly perceived as necessary for our strategic and industrial survival over the coming years, assuming those folks in the New York Times and elsewhere who claim that this will not happen and cannot happen prevail.

I might mention, by the way, the New York Times said 100 years ago that we could not and should not develop the electric lightbulb. So I think we can take that as a useful example of their scientific expertise at this point.

But I think the question is extraordinarily critical. I think, as I said, the Soviets within 10 minutes after the President finished speaking recognized that this was the doctrine of the United States and all that can be sabotaged now is the implementation of that doctrine, much to the distress of the United States as both a strategic and industrial power.

Thank you, Mr. Chairman.

[The prepared statement of Ms. Kokinda follows:]

# PREPARED STATEMENT OF SUSAN KOKINDA
## NATIONAL DEMOCRATIC POLICY COMMITTEE

Thank you for the opportunity to testify on this most important subject. At last year's hearings, the NDPC urged that the U.S. government adopt a crash program for the development and deployment of space-based directed energy beam weapons as strategic defense systems. In the intervening year, our political action committee, in concert with our close collaborators in the Fusion Energy Foundation, has organized debates, collected tens of thousands of petitions, circulated leaflets and literature and generally endeavored to mobilize Americans behind a strategic policy of "mutually assured survival" based on the most advanced concepts in weapons systems.

On March 23, 1983, in his historic address to the nation, President Reagan announced that the U.S. would pursue a doctrine of strategic defense and called for a scientific mobilization to accomplish that end. And, while the President did not identify particular weapons systems, both on and off the record briefings by the President, members of the National Security Council and the Secretary of Defense have made abundantly clear that the President was speaking primarily of the family of plasma technologies which are directed energy beam systems.

Last Wednesday evening, on April 13, NDPC Advisory Council Chairman, Lyndon H. LaRouche, Jr., addressed a conference of 600 people gathered here in Washington, DC, to discuss the strategic and economic promise of directed energy beam technologies. Since that major policy address defines both strategic and budgetary questions in the period ahead, the remainder of our testimony will be excerpts from that statement, entitled "The Fall-Winter U.S.-Soviet 'Missiles Crisis' Negotiations From the Standpoint of the New U.S. Strategic Doctrine."

"...President Reagan on March 23 established a new operational strategic doctrine of the United States. The strategic policy of the United States is now the rapid development and deployment of strategic anti-ballistic missile defense-systems intended to render all strategic nuclear missiles technologically obsolete. Inevitably, not long after the President's televised address was noted in Moscow, the Soviet Union upgraded its ongoing development of beam-weapon anti-missile systems, with a commitment to match or exceed everything the United States might do. Now, whether anyone likes that fact or not, both superpowers are locked into a commitment to high rates of development and deployment of directed-beam anti-ballistic-missile defense systems.

I predict that the Soviet Union will have a first-generation strategic ABM defense system in place during the period 1988-90, and possibly earlier. We can match that performance; if we fail to match it, we have the alternative of learning to say, "Yes, Comrade Commissar" in passable Russian. Those who argue that this something down the pike for 20 years from now obviously have no comprehension of where relevant technologies stand. In terms of existing technologies, we are much, much closer to full-scale strategic ABM defense systems than we were to a fission bomb in 1939 or 1940. Directed beam systems which can be engineered and deployed to kill ballistic missiles presently exist. What is technologically out-of-reach today, can be brought within reach as laboratory models or development prototypes within ranges of two to five years. The Soviet Union has that capability; we have that capability, on condition that we commit ourselves to develop it.

...With the President's declaration of March 23, the world strategic situation has been changed fundamentally and irreversibly. The new U.S. strategic doctrine, is operational, unstoppable, and irreversible. To the extent its implementation might be sabotaged by action in the Congress, that action would not change the doctrine, but would tend only to ensure that the Soviet Union achieves qualitative strategic superiority. If misguided members of Congress do sabotage the effort during 1983 and 1984, they will come to be viewed with bitter tears of hatred by a growing portion of our citizenry.

### Outline of a Strategic ABM System

If I were asked to develop a strategic ABM defense system today, I would put the following model of reference into an appropriate sort of computer system, and then assemble a task-force of qualified professionals to make suitable corrections in the parameters of my original design. The basic strategic ABM system would have four categories of assignments: (1) a space-based ABM system, assigned to destroy between 93 percent and 95 percent of the maximum salvo of ballistic missiles and their deployed warheads entering the stratosphere; (2) a network of point-defense systems, defending all major military targets, population centers, and other logistical targets, using directed-beam technologies to replace the assignments of a Spartan-Sprint point-defense complex; (3) a general terminal defense system, to take out warheads escaping the space-based defense-system, and falling between the cracks of the point-defense system, (4) anti-submarine warfare.

...Suppose the United States had such a system now. Suppose the Soviet Union had such a system and we did not. The answers to those questions out to be clear.

Both superpowers have the scientific and production capabilities, either presently existing or which can be developed within five years or more, to create and dploy such a strategic ABM system. On condition that we send the systems analysts off to some useful occupation, such as picking fruit, and approach this task the way we mobilized our way out of the depression over the 1939-43 period, with some memories of pre-1967 NASA research-and-development added, something far better than my first-approximation model would be operating within this decade, and both powers would have it.

## Effects Upon Economics

Five days after the President announced the adoption of our new strategic doctrine, the Soviet weekly whose name translates as Economic Gazette came off the press. This issue, Number 14 for 1983, contains on page two a featured article written by the head of the Soviet laser program, Academician Velikhov. (The article describes the industrial and productivity implications of laser technologies.)

...To provide you a general sense of how important these economic spin-offs of military laser technology are, and to demonstrate why these economic spin-offs will be a critical part of Soviet thinking about the coming missile-crisis negotiations, you must have the following parts of the overall picture.

If we of the United States are not morally a collection of crazy lemmings jumping over a cliff of "post-industrial" collapse, we shall probably spend, in terms of today's purchasing-power, about $1 trillion, more or less, on combined strategic and tactical applications of lasers and laser-like devices during the remaining years of this century. For the edification of spies from the 'New York Times', let it be clearly understood that I am not leaking some highly secret fact of our government's present policy-planning. Anyone who understands the logic of the U.S.-Soviet laser arms race and also knows a few basic facts about the situation, will recognize that my estimation of about $1 trillion is a safely conservative figure. Perhaps no one in our government is presently thinking in terms of such large figures, but by early 1985 the majority of members of our Congress will be racing ahead of one another to prove they are not slackers when it comes to supporting our national defense in this area. The best comparison is found by looking back to the 1939-43 period of our leap upward out of a long economic depression. What the Congress was willing to spend in 1938, as compared with what it was willing to spend in 1940, is a bit of our history to bear in mind on this point.

The importance of this projected figure of $1 trillion is seen by asking ourselves not only what Congress will become willing to spend over the successive years 1984, 1985, 1986, 1987. We must also think of what a trillion rubles of added arms spending means for the Soviet economy. We must throw into the wastebasket every-think Robert McNamara and his Whiz Kids have said over the past 30 years, and go back to the way of thinking of General Douglas MacArthur and Lazare Carnot and General Scharnhorst before him.

I am certain that the program I am projecting will cause the greatest economic boom in world-history in the United States. What Academician Velikhov wrote in the indicated issue of the Economic Gazette is only a hint of the sweeping revolution in medical science, as well as agricultural and industrial technologies which have existed as off-the-shelf technologies for some time, but which we simply have not been using in anything approximately proper emphasis. During the later part of this decade, some of the effects of military R&D will spin off into the economy generally, somewhat as the case of the 1939-43 period indicates.

I predict that spending $1 trillion for military hardware of this type will not cost the U.S. economy a single penny. I mean that the increases in average level of income per person will rise by a much greater amount, as benefits of technological spin-offs, than we spend on military items which produce those beneficial spin-offs. It is true that military spending as such is economic waste; however, if we think of everything we spend for advanced military technologies of this kind as like money invested in a gigantic research-and-development laboratory, we begin to see in what way military R&D will pay back the economy many times for every nickel the Congress allocates to this $1 trillion program over the coming 15 years. It is not unrealistic to project that between now and the end of this century. This increase will be effected in two interconnected ways. First, we shall reverse the post-1955 trends in employment in our economy. The percentile dropped from 62 percent in 1946 to less than 29 percent today. Simply be reversing this drift into "post-industrial" ruin and rubble, as a 1939-43 type of mobilization will require us to do, could double our national per capita output and income over the coming 15 years. Second, once the effects of the new military technologies begin to spill over into the economy, we should begin to reach rates of annual increase in productivity of not less than 5 percent per year, slightly above those of the early 1960s expansion in aerospace R&D.

From Moscow, this easily seen potential recovery of the U.S. economy has the highest order of strategic significance. During the come three to four years, the Soviet military sector can match almost anything we would presently project as reasonable progress in strategic ABM systems. But, could they still match us after 1986 or 1987?....Our strategic advantage is our higher potential for generating spin-offs from the military R&D sector into the civilian economy. By 1986, at the latest, we should be able to afford rates of advancement in expenditures for R&D which would appear presently to be beyond Soviet capabilities at this point.

There is nothing which is properly describable as mysterious about either the military of civilian-economy feasibility of this program. It is true that many voices, such as the 'New York Times,' insist that this is all unworkable 'star wars' technology; it should be remembered that the 'New York Times' said the electric-light bulb should not be developed one hundred years ago, and that people of the same views said such silly things as that it would be ten years after World War II before the Soviet Union could develop a fission-weapon, and that thermonuclear fusion was impossible. Others say this is all music of the future, no earlier than 20 years ahead. In some cases, these people are outrightly liars; in other cases, they could know the facts but refuse to discover those facts; in other cases, even among some professionals, they are sincerely ignorant of some basic principles of Riemannian physics.

...It is clear that we have adequate systems available at the present moment, or will have them during two to five years ahead within the context of a crash-program effort. Some further developments are perhaps ten years ahead, some 15, and so forth. We have a general idea of the directions in which fundamental and developmental work for future systems must be aimed, and can estimate with fair accuracy how long will be required to make such breakthroughs.

For reasons I have already indicated, we must not make the mistake of limiting research and development to military objectives only. Our ability to sustain and to accelerate progress in the military assignments depends upon directing benefits as early as possible to the civilian economy. It is in the injection of such technoloiges into the civilian economy that the race will be won."

## RECESS

Senator RUDMAN. Thank you very much for your statement. The entire statement will be placed in the record.

Is Mr. James Peirce here?

[No response.]

Senator RUDMAN. We will recess for a few minutes. He was not scheduled to appear until 11:30.

[Recess.]

Senator RUDMAN. We will stand in recess until 2 o'clock.

[Whereupon, the subcommittee was recessed, to reconvene at 2 p.m. the same day.]

(AFTERNOON SESSION, 2 P.M., TUESDAY, APRIL 19, 1983)

# NONDEPARTMENTAL WITNESSES

## OPENING REMARKS OF SENATOR MC CLURE

Senator **McCLURE** [presiding]. The subcommittee will come to order.

This afternoon the subcommittee will continue to receive testimony on the fiscal year 1984 defense appropriations bill from witnesses outside the Department of Defense.

On behalf of the subcommittee, I want to welcome all of our witnesses this afternoon. In order to accommodate all of the groups scheduled to testify, we ask that you summarize your statement in 10 minutes or less and file your written statements for the record. Your testimony will be published as part of the subcommittee hearing record this year.

We will probably be interrupted by either a procedural vote or a cloture vote motion at 3 o'clock or shortly before that. But it will be our intention to recess only long enough to take care of that matter and then try to get back to hear the rest of the witnesses.

Our first witness this afternoon is Dr. Donald Hammerfley, deputy medical director, American Psychiatric Association.

Doctor, again at this point I would like to apologize to you personally and to the other witnesses for the delay. But things do sometimes happen on the floor that we cannot anticipate.

## AMERICAN PSYCHIATRIC ASSOCIATION

## STATEMENT OF DONALD W. HAMMERFLEY, M.D., DEPUTY MEDICAL DIRECTOR, AMERICAN PSYCHIATRIC ASSOCIATION

### CHAMPUS INPATIENT PSYCHIATRIC TREATMENT BENEFITS

Dr. **HAMMERFLEY**. My name is Donald W. Hammerfley and I am deputy medical director for the American Psychiatric Association. I have served as an enlisted man, a medical officer in World War II and the Korean conflict, and as chief of staff in a Veterans' Administration hospital.

I am pleased to have this opportunity to testify on behalf of the American Psychiatric Association, a medical specially society representing over 28,000 psychiatrists nationwide, and our support for the CHAMPUS inpatient psychiatric treatment benefit.

We recommend the benefit be made without arbitrary limitations, provided that treatment is provided in accordance with well-established current peer review programs. I would like to say that our main reason for asking to testify had to do with a detail with the inpatient benefit under CHAMPUS relating to the 60-day limitation for inpatient benefits that was imposed last year, and our written statement that is now in preparation will address that question in much more detail.

### PEER REVIEW PROGRAM

I will just highlight for a couple of minutes the point we want to make. As the committee perhaps knows, the APA has a long and well-established record of joining forces with CHAMPUS developing a model system of peer review for inpatient psychiatric care. Currently, the system looks at every case that has been hospitalized 20 days or more and an independent review by three psychiatrists is made of each of these cases and a recommendation as to whether or not treatment should be continued.

Any case then being continued to 60 days is automatically peer reviewed again. Usually the cases going longer than 60 days—and this is the group we are particularly talking about—are most often adolescents or children. We are talking about military dependents in the younger age group in particular here.

The peer review program assures medical necessity and promotes quality and helps contains cost, and the CHAMPUS officials have testified to that effect. Congress has expressed its faith in these peer review efforts and encouraged their continuance.

Most recently, in the 97th Congress during the consideration of the fiscal year 1983 continuing resolution, Congress adopted language in section 785 of the bill which states:

> None of the funds appropriated by this Act shall be available to pay claims for inpatient mental health services provided under the Civilian Health and Medical Program of the Uniformed Services in excess of 60 days per patient-year, provided that the foregoing limitations shall not apply to inpatient mental health services provided pursuant to a waiver for medical or psychological necessity granted in accordance with the findings of current peer review as prescribed in the quidelines established and promulgated by the Director of Civilian Health and Medical Program of the Uniformed Service.

I read that language because it is the interpretation of that language and developing the criteria by which this will be applied, the interpretation of the CHAMPUS officials, that is in question. You should know that the CHAMPUS is presently preparing interim final regulations which sharply restrict the scope of current peer review by proposing to grant waivers of the 60-day limitation only when the patient is a significant risk to self or others, is homicidal or suicidal, or the patient has concurrent medical complications.

We are deeply concerned about this, simply because there are many other medical criteria that are outlined in the claims review manual for peer review that has been developed by CHAMPUS that are the medically necessary acceptable conditions for justifying somebody in a hospital. We would not like an interpretation that says we should only have a rule of hospitalization where the person is suicidal or homicidal.

In view of current standards of medical practice, a waiver of a 60-day limit is also warranted when the patient continues to suffer from an acute mental disorder, where the discharge to a less intensive level of care will quickly lead to the patient being unable to function and the patient is unmanageable to a lesser level of care would preclude the achievement of reasonable treatment goals.

### REPEAL OF ARBITRARY 60-DAY LIMITATION INPATIENT CARE

Mr. Chairman, we urge this committee to recommend the repeal of the arbitrary 60-day limitation on inpatient psychiatric care and not perpetuate the stigma and fear of mental illness. I believe it is important to recognize that we are speaking of patients in general need of treatment, most often the younger age group, with schizophrenia, profound depressive disorders, and other disabling psychiatric illness.

I am speaking of dependent children who have serious emotional disorders. I am not speaking of those who would abuse the health insurance coverage.

If the committee determines that it must again impose a 60-day limit, we recommend it again be accomplished by continuation, reaffirmation of the current peer review, which is a system of planned professional evaluation which insures that the patients receive only medically necessary care. At the same time, we would expect the committee to insist that the DOD's regulatory response fully comply with the spirit of the law. Neither the legislative nor accompanying report language should be construed to permit an arbitrary change in the current peer review program.

Thank you, sir.

Senator **McClure**. I think the language that you referred to is an amendment offered by Senator Inouye last year. As I recall his debate, his explanation concerning it, it was the concern over the growth of the cost of this particular program.

I am a little puzzled, because I do not have all of the background at the tip of my tongue, and perhaps you can help me. The number of juveniles, dependents, and what the growth of that program has been over the last several years—is it not a case in which that caseload has been expanding very dramatically?

Dr. **Hammerfley**. I believe the caseload has been quite stabilized in the last 3 years or 4 years. I would be glad to include such data in our written response.

### CONCERN OVER INTERPRETATION OF AMENDMENT

Senator **McClure**. Is your concern the language, the thrust of the amendment, or is it the interpretation of the amendment?

Dr. **Hammerfley**. The interpretation of the amendment is our immediate concern. We are working with that interpretation in a collaborative way with CHAMPUS, but we still have concerns about it.

Senator **McClure**. I notice on page 33 of the Senate report last year, in reference to this amendment it contains the following statement:

> This action has become necessary in light of statistics showing the average cost per inpatient psychiatric admission to be nearly twice that for inpatient surgery or medical care.

Does that pattern concern you, or is it something you believe is both sustainable and justifiable?

Dr. **Hammerfley**. Well, I believe it is understandable if one looks at the nature of the illness of some of these affected beneficiaries, when indeed they do require long-term hospitalization. The average length of stay is under 20 days for an inpatient psychiatric patient, which is only slightly more than for general medical care today.

Senator McCLURE. That is well under the limitation, then, is it not?

Dr. HAMMERFLEY. Yes. But we are concerned about not the 60 to 70 percent that are less than 20 days, but that last 10 percent that may in some cases go over the 60 days.

### ALTERNATIVE SUGGESTIONS

Senator McCLURE. Do you have an alternative suggestion that might aid us in making certain that costs do not run away in this area, but at the same time meet the problems that you outline?

Dr. HAMMERFLEY. We are working through our national advisory committee with CHAMPUS to phrase such stringent criteria to assure medical necessity of these cases.

Any we know that, indeed, some of them will be expensive, just like certain kinds of surgery cases are expensive. That is sort of the basic principal of insurance risk, is the mechanism to cover the occasional expensive case.

Senator McCLURE. Thank you very much for your testimony.

The written statement, when received, will be made a part of the record. Thank you.

[The prepared statement follows:]

American Psychiatric Association

## STATEMENT

presented by

Donald W. Hammersley, M.D.
Deputy Medical Director

My name is Donald W. Hammersley, M.D. and I am a Deputy Medical Director of the American Psychiatric Association. I have served as both an enlisted man and a medical officer in World War II and the Korean Conflict and as chief of staff of a Veterans Administration Hospital.

I am pleased to have this opportunity to testify on behalf of the American Psychiatric Association, a medical specialty society representing over 28,000 psychiatrists nationwide, on our support for the CHAMPUS inpatient psychiatric treatment benefit. We recommend the benefit be maintained without arbitrary limitations, provided that treatment is provided in accordance with the well-established current peer-review program.

As the Committee knows, the APA has a long and well-established track record of joining forces with CHAMPUS in developing a model system of peer review of inpatient psychiatric care. Currently, the CHAMPUS "Manual for Inpatient and Outpatient Psychiatric Claims Review" requires that fiscal intermediaries (FIs) receive a "treatment report" for each beneficiary receiving care for 20 days. The National Advisory Committee decided on 20 inpatient days in the initial step of this project because data on the length of stay of psychiatric patients in all types of hospitals indicated that between 60 and 70 percent of all patients admitted had lengths of stay of 20 or less days. This 20 day length of stay is used as a review point only and must not be considered a limit in any way. All CHAMPUS beneficiaries who remain in a hospital for 20 or more days are given a very detailed review. This means that 3 independent psychiatrists (or psychologists) who participate in the program are chosen by the FI to recommend whether treatment is medically/psychologically necessary and should be continued. The FI makes a decision of denial or approval of continued care based on the recommendations received. Any CHAMPUS case in which a beneficiary is receiving care at 60 days is automatically sent by the FI for peer review. Cases which are approved for care beyond 60 days (usually children and adolescents) are subsequently reviewed every 30 days thereafter. Since the peer review program went into operation in February 1980, approximately forty percent of the cases reviewed have resulted in either the discharge of a patient or a change in the nature of care (level or setting) for a patient. Both results have been cost saving. Length of stay for all cases subject to peer review has been reduced since the program was implemented. The current average length of stay for patients between the ages 20-64 was 19.4 days for the 12 month period ending March 1982. Those cases currently exceeding 60 days are largely children and adolescents. These are the cases which will be hurt most by the new limitation and accompanying waiver criteria.

The peer review program -- which is neither "Hatchet-Jobs" nor claims "whitewashing" -- not only promotes quality but also contains costs. We understand that according to Dr. Alex Rodriguez, the Medical Director of the CHAMPUS program, the peer review program has led to "outright savings" of between four and five million dollars per year since the beginning of this program three years ago. The Committee should note that these are the savings above the actual annual cost of peer review to CHAMPUS. Even more important is that an additional saving may also be taking place through a "sentinel" effect of psychiatric peer review. In the years 1981 to 1982 medical and surgical inpatient costs increased 35% in the CHAMPUS program. During the same time period psychiatric inpatient costs increased 20%. In prior years before peer review the rate of increase of medical, surgical and psychiatric costs were quite similar and thus we may be talking of cost savings of almost $20 million annually. This indirect saving is three to four times the direct savings to the CHAMPUS program. Interestingly, Dr. Rodriguez also estimates that the quality of records and patient care has increased in that important insurance program for military dependents and retirees.

We are proud that the American Psychiatric Association's National Advisory Committee under this contract has developed for CHAMPUS a network of psychiatrists who are qualified to do peer review. The Association has also developed guidelines to help the CHAMPUS claims reviewers working in the various fiscal intermediaries' offices assess the claims covering psychiatric services and to make consistent decisions regarding those services.

The Congress has often expressed its faith in these peer review efforts. Most recently in the 97th Congress, during consideration of the FY '83 Continuing Resolution, the Congress adopted language in Section 785 of that bill which states:

> "None of the funds appropriated by this Act shall be available to pay claims for inpatient mental health services provided under the Civilian Health and Medical Program of the Uniformed Services in excess of sixty days per patient per year. Provided, that the foregoing limitation shall not apply to inpatient mental health services; provided pursuant to a waiver for medical or psychological necessities granted in accordance with the findings of current peer review, as prescribed in guidelines established and promulgated by the Director, Office of Civilian Health and Medical Program of the Uniformed Services."

We opposed then and still continue to oppose any arbitrary limitation on inpatient psychiatric care. Such limitations result from misperceptions about the nature of mental illness and its treatment and are compounded by an individual's denial of becoming the victim of mental illness and the stigma attached to it. The Committee should appreciate that mental illness strikes in a random fashion and no one deliberately attempts to abuse the psychiatric benefit and remain in psychiatric treatment because there are no day or dollar limitations. Evidence from the professional review reports indicates that a large number of CHAMPUS patients are psychotic and another significant number are young persons with emotional and behavioral disorders. It is apparent that military life causes or contributes to significant psychiatric problems. Therefore, unsophisticated comparisons with civilian experience are not fully appropriate. Equating this psychiatric benefit with that provided under Blue Cross/Blue Shield is not feasible.

The APA believes that instead of cutting benefits to cut costs, CHAMPUS should reduce expenses by allowing us to strengthen its peer review mechanisms thereby assuring that patients get only appropriate and necessary treatment. CHAMPUS agreed and together we have established peer review projects that have not only been successful in reducing costs but also in improving the quality of treatment. Because of this Committee's deep interest in controlling rising health care costs, we endorsed the recent action of Congress in reaffirming its support for the present cost-effective [illegible]ew program.

Mr. Chairman, with this brief background in mind, the APA is deeply disturbed by the method of implementation of the new 60-day limitation on inpatient mental health services by CHAMPUS. The problem results from the manner in which CHAMPUS is interpreting the law and developing the waiver criteria. You should know that CHAMPUS is presently preparing interim final regulations which sharply restrict the scope of current peer review by proposing to grant waivers of the 60-day limitation only when (1) the patient is a significant risk to self or others, or (2) the patient has medical complications. In both cases the patient must require the type, level and intensity of service which can only be provided in an inpatient setting. We are deeply disturbed that the proposed criteria reflect only a small fraction of the acceptable conditions for continued inpatient care stated in the Manual for Inpatient and Outpatient Psychiatric Claims Review which constitute current peer review.

Mr. Chairman, if this misguided illegal interpretation of statute is allowed to go unchallenged, many severly emotionally disturbed children and adolescents under carefully controlled treatment regimens will no longer be eligible for CHAMPUS reimbursement for their continued care. As you know, the treatment needs of children and adolescents often require more intensive care exceeding 60 days. These young patients should not be restricted from receiving care at an age when treatment has a lifelong effect. To deny necessary treatment to any mentally ill patient is neither medically nor economically sound. Such a policy would likely lead to relapse and a need for more intensive care, and consequently, greater overall expense to CHAMPUS. Commonly accepted medical practice would support a finding that children and adolescents should not be held to a suicidal/homicidal standard as the sole psychiatric criteria constituting medically necessary hospitalization. In view of current standards of medical practice, a waiver of a 60-day limit is also warranted when the patient continues to suffer from an acute mental disorder (or acute exacerbation of a chronic mental disorder) of such severity that (1) discharge to a less intensive level of care will lead quickly to the patient being unable to function; and (2) the patient is unmanageable at a lesser level of care; and (3) because of this, discharge to a lesser level of care would preclude the achievement of reasonable treatment goals. The

CHAMPUS Manual cites 10 accepted criteria for continuation of hospitalization which reviewers look for when reviewing claims. Full regulatory compliance with the statutory requirement of medical and psychological necessity without jeopardizing the fiscal integrity of the CHAMPUS program calls for maintaining the full set of conditions for continued hospitalization.

Mr. Chairman, we urge this Committee to repeal the arbitrary 60 day limitation on inpatient psychiatric care and not perpetuate the stigma and fear of mental illness. Do not heighten the stigmatic tragedy and institutionalize the discrimination against the mentally ill.

I believe it is important to recognize that we are speaking of patients who are in genuine need of treatment -- schizophrenics, those suffering from profound depressive disorders, organic psychoses, alcoholism and substance abuse, and other disabling psychiatric illnesses. I am speaking of dependent children who have serious emotional disorders. I am not speaking for those who would abuse the health insurance coverage.

I want to emphasize that I am speaking of a disease -- mental illness -- not the achievement of potential, happiness or social well being. I am speaking of treatments as aggressive as physical health care techniques and not programs which seek to expand the consciousness or raise the awareness of the individual in society.

If the Committee determines that it has no alternative but to again impose a 60 day limitation to curb any potential abuse of this health insurance coverage, we recommend it be accomplished by continuation and reaffirmation of current peer review which is a system of planned professional evaluation which ensures that patients receive medically necessary care of the highest quality at affordable costs. At the same time we would expect the Committee to insist that the DoD's regulatory response fully comply with the letter and spirit of the law. Neither the legislative nor accompanying report language should be construed to permit an arbitrary change in the current peer review program implementation.

## SUBCOMMITTEE RECESS

Senator McClure. The committee will stand in recess, briefly, pending a vote on the floor.

[Whereupon, at 3 p.m., Tuesday, April 19, the subcommittee recessed, to reconvene at the call of the Chair.]

# DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1984

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WEDNESDAY, APRIL 20, 1983

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, D.C.*

The subcommittee met at 10:15 a.m., in room 192, Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senator Stevens.

## NONDEPARTMENTAL WITNESSES

### INTRODUCTION OF WITNESSES

Senator STEVENS. I want to apologize for the delay. The subcommittee wants to continue to receive testimony in the fiscal year 1984 defense appropriations bill for witnesses outside the Department of Defense.

On behalf of the subcommittee membership, I welcome the witnesses who appear here this morning and ask that you summarize your statement in 10 minutes or less and we will file your written statements for the record. Your testimony will be published as part of the subcommittee record this year.

Our first witness this morning will be Dr. John Stocker, vice president of the Shipbuilders Council of America.

Mr. Stocker.

## SHIPBUILDERS COUNCIL OF AMERICA

### STATEMENT OF JOHN J. STOCKER, VICE PRESIDENT, SHIPBUILDERS COUNCIL OF AMERICA

### BUDGET REQUEST

Mr. STOCKER. Thank you, Mr. Chairman. My name is John J. Stocker. I am vice president of the Shipbuilders Council of America, a trade association representing the Nation's shipbuilders, ship repairers, and ship component manufacturers.

We are here today to speak to you in support of the Navy's ship maintenance program request for fiscal year 1984.

In fiscal year 1984, the Navy is requesting about $4.5 billion for repair and alteration of its fleet. This total represents an increase of approximately $200 million over last year's request of $4.3 billion.

### OVERHAUL PROPOSALS

Given inflation, albeit modest over the past year, fiscal year 1984 represents a no-growth situation in terms of dollars and, I might add, workload. The number of regular overhauls programed for fiscal year 1984 is lower than that proposed for fiscal year 1983.

This causes us concern for two reasons. One, it has became apparent, in what has been characterized as a no-growth market in fiscal year 1984, that the Navy will be reducing its dependence on the private sector, although it continues to support the 70–30 workload split between public and private shipyards.

In fiscal year 1982, the Navy placed 61 percent of its ship repair work in the Navy yards. During fiscal year 1983 that percentage has grown to 66 percent. It is estimated by the Navy Department that 68 percent of the fiscal year 1984 program will be sent to the Navy yards.

In dollars, this means that the Navy will have increased the public sector workload from a value of $2.4 billion in fiscal year 1982 to $3 billion in fiscal year 1984, or an increase of about 25 percent in a 2-year period.

In the same timeframe, Navy ship repair work destined for private yards has shrunk from $1.6 billion in fiscal year 1982 to about $1.5 billion in fiscal year 1984, or a decline of 6 percent in the past 2 years.

Thus, despite a generally no-growth budget, the Navy has reoriented its market share to increase support for the public yards, while the private yards face a declining workload.

This leads to the second reason for our concern with the reorientation of the Navy repair market in a no-growth budgetary situation.

### DECLINE IN SHIPBUILDING WORKLOAD

With the decline in total workload for the active private shipbuilding base, many yards have turned to the Navy repair market as an alternative, despite the fact that there is insufficient Navy work to sustain the industrial base. How serious is this current decline in shipbuilding workload?

Mr. Chairman, if you turn to the charts between pages 4 and 5, I will just speak briefly about chart No. 1.

Chart 1 portrays total employment engaged in both Navy and non-Navy work over the past 12 years. It demonstrably shatters the opinion of many people that Navy shipbuilding and ship repair on its own can preserve an active base for national security.

Commercial shipbuilding and ship repair is required to maintain that industrial base.

At a peak in 1977, 48,000 workers were employed on non-Navy projects. By late 1982, that number had dropped by nearly one-half to 28,000; a reduction of 20,000 employees in 5 years.

During the same period Navy projects supported an increase in employment of 5,000; from 77,000 in 1977 to 82,000 in 1982.

In other words, from the peak in 1977 there has been a net employment decline within the active base of 15,000 workers or a reduction of about 12 percent and we are projecting that by the end of fiscal 1983 we will have experienced a job loss of about 32,000 workers.

Additionally it should be noted that a Navy report prepared in the Office of the Assistant Secretary of the Navy for Shipbuilding and Logistics during the summer of 1982 concluded that even a 10-percent loss in facilities, capabilities, and manpower could jeopardize the ability of U.S. shipyards in the private sector to provide industrial support to the Navy and merchant fleets during wartime.

This inability of the commercial sector to support the industrial base is the result of a decline not only in commercial shipbuilding but also in commercial ship repair as well.

### DECLINE IN COMMERCIAL SHIP REPAIR ACTIVITY

The decline in commercial ship repair activity over the past 12 months has been startling. Approximately 11 percent of the world trading fleet has been idled by reason of the continuing international and domestic shipping recession.

Under these circumstances, many shipowners are deferring or limiting maintenance on existing vessels.

Vessel drydock and repair demands are not materializing, and the near-term prognosis is not particularly promising. Market conditions have thereby become extremely competitive. As ship construction activity has diminished overall, some U.S. shipbuilding yards in an effort to sustain economic viability are shifting emphasis and work force toward ship repair.

Naval ship repair and overhaul work has always been a significant market for the industry. Better than 60 percent of the private sector repair work force at the close of last year was devoted to work on Navy ships. And to their credit private shipyards have improved their performance on naval ship overhauls by an average of 45 days during the past 2 years.

Projections for future Navy repair work loading in private yards in the outyears do not look any more promising than they do in fiscal year 1984. And, in fact, our confidence level is limited because of the vagueness of certain considerations, dispersal considerations, increased public yard employment and naval shipyard loading for overhauls, among others.

In summary, the combination of declining commercial workload and a reorientation of the Navy's industrial plans to support the public sector at the expense of the private sector threatens the continued viability of the Nation's private shipbuilding and ship repair industrial base.

### RECOMMENDATIONS

What do we recommend? We recommend a reorientation of Navy yard work to the private sector. In some fashion that will represent a balanced and equitable allocation of work in the Navy's apparent overall program.

Mr. Chairman, thank you very much. I am ready to answer any questions.

[The prepared statement of John J. Stocker follows:]

# PREPARED STATEMENT OF JOHN J. STOCKER
## VICE PRESIDENT
## SHIPBUILDERS COUNCIL OF AMERICA

Mr. Chairman, Members of the Subcommittee:

I want to thank you for this opportunity to appear before the Subcommittee to discuss the Navy's ship maintenance program for FY 1984. The Shipbuilders Council of America is a trade association representing the Nation's shipbuilders, shiprepairers and ship component manufacturers. (For current members, see Attachment A.) As such, we have a continuing interest in the Navy's management of the maintenance program and in the long-time Congressional support for this program.

In FY 1984, the Navy is requesting $4.5 billion for repair and alteration of its fleet. This total represents an increase of approximately $200 million over last year's request of $4.3 billion. Given inflation, albeit modest over the past year, FY 1984 represents a no-growth situation in terms of dollars. However, due partly to a change in maintenance philosophies and to internal budgetary constraints, what has radically changed from FY 1983 has been the tremendous reductions in regular overhauls and the sharp increase in selected restricted availabilities (SRA). In FY 1983, there were 73 overhauls and 80 SRAs. In FY 1984, the number of overhauls has declined to 54, while SRAs have increased to 102. Regular overhauls constitute the most demanding workload since it involves a major repair of all ship components, hull, and superstructure where the ship is drydocked for several months. An SRA, on the other hand, involves minor repair and requires a docking period of only one or two months. Regular overhauls offer the opportunity for both homeport and coastwide competition, while SRAs are restricted to homeports only.

The change in maintenance philosophy, noted earlier, is known as phased maintenance. Under this concept, the Navy reduces the number of regular overhauls over the life cycle of a ship through an increase in operating cycle between overhauls. The goal, which is laudable, is to reduce the life-cycle maintenance costs of a ship. In order for this philosophy to work, the number of SRAs required during the operating cycle will have to increase. However, the phased maintenance philosophy has been initiated only in the case of two auxiliary ship classes.

Since it is really too early to feel the effects of phased maintenance, internal Defense Department budgetary constraints had a major role in reducing the available funding for regular overhauls, and it is quite likely that ship maintenance backlogs will occur by the end of FY 1984.

Therefore, it is safe to say that FY 1984 represents a no-growth situation not only in terms of dollars but also in terms of available work.

This causes us concern for two reasons. One, it has become apparent, in what has been characterized as a no-growth market in FY 1984, that the Navy will be reducing its dependence on the private sector, although it continues to support the 70-30 workload split between public and private shipyards. In FY 1982, the Navy placed 61 percent of its shiprepair work in the Navy yards. During FY 1983, that percentage has grown to 66 percent. It is estimated, by the Navy Department, that 68 percent of the FY 1984 program will be sent to the Navy yards. In dollars, this means that the Navy will have increased the public sector workload from a value of $2.4 billion in FY 1982 to $3.0 billion in FY 1984 or an increase of 25 percent in a two-year period. In the same time frame, Navy shiprepair work destined for private yards has shrunk from $1.6 billion in FY 1982 to $1.5 billion in FY 1984 or a decline of 6 percent in the past two years. Thus, despite a generally no-growth budget, the Navy has re-oriented its market share to increased support for the public yards, while the private yards face a declining workload.

In addition, with the removal of Congressionally-mandated ceilings on Navy yard manpower, the Navy has increased the numbers of full-time permanent employees from 71,448 in August 1982 to 75,264 in January 1983. This increase represents a growth of 3,816 people in a five-month period. In the same time frame, the 27 private shipyards in the active base have reduced their employment by 4,923. (See Attachment B.)

This leads to the second reason for our concern with the re-orientation of the Navy repair market in a no-growth budgetary situation. With the decline in total workload for the active private shipbuilding base, many yards have turned to the Navy repair market as an alternative, despite the fact that there is insufficient Navy work to sustain the industrial base. How serious is the current decline in shipbuilding workload?

In order to define the decline in graphic form, we have taken data from the Maritime Administration's definition of active shipbuilding facilities, of which there are currently 27 yards. (See Attachment C.)

Chart I portrays total employment engaged on both Navy and non-Navy work. It demonstrably shatters the fallacy of vision of those who contend that Navy shipbuilding, on its own, can preserve an active base for national security.

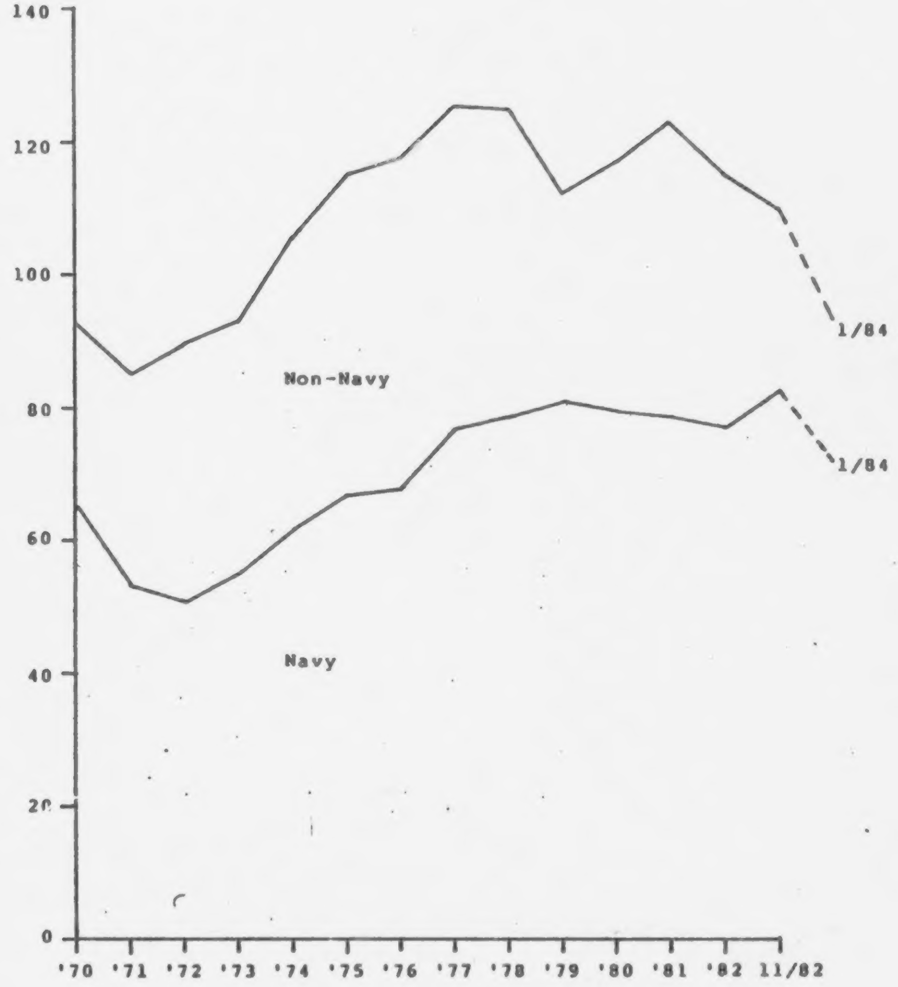
At a peak in 1977, 48,000 workers were employed on non-Navy projects. By late 1982, that number had dropped by nearly one-half to 28,000: a reduction of 20,000 employees in five years. During the same period, Navy projects supported an increase in employment of 5,000: from 77,000 in 1977 to 82,000 in 1982.

In other words, from the peak in 1977, there has been a net employment decline within the active base of 15,000 workers, or a reduction of about 12 percent, and we can confidently state that job loss has accelerated since late last year. Additionally, it should be noted that a Navy report, prepared in the Summer of 1982, concluded that even a ten percent loss in facilities, capabilities and manpower could jeopardize the ability of U.S. shipyards in the private sector to provide industrial support to the Navy and merchant fleets during wartime.

Charts II, III, IV and V portray in greater detail the decline in shipbuilding base employment, by regions as requested, since 1977. The Gulf Coast (Chart II) was more severely affected than other areas with a loss of jobs in both Navy and non-Navy work aggregating almost 16,000, or a total decline of about 43 percent. On the East Coast (Chart III), an increase in Navy work employment helped to offset a decrease in

CHART I

Shipyard Employment
(Active Base)

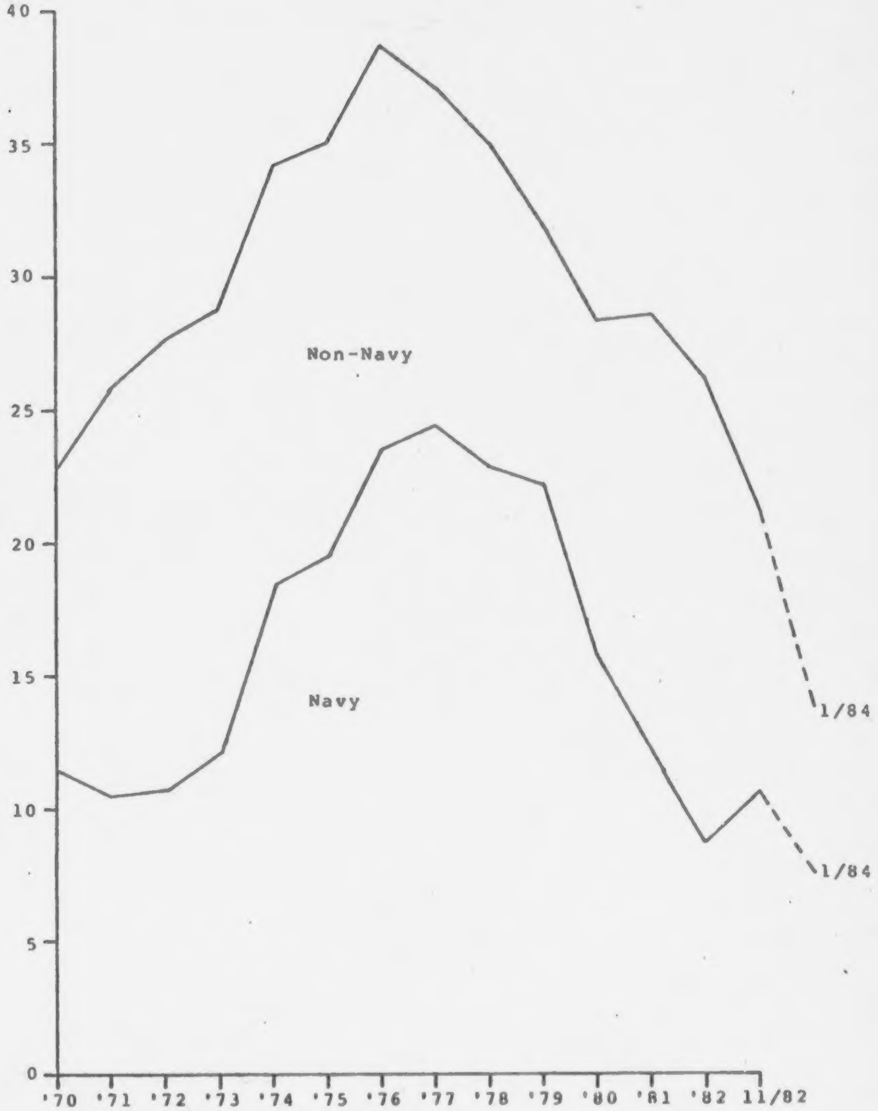


1. Total plant employment in thousands (as of January 1 in each year).

2. Non-Navy includes commercial construction and repair, MARAD, other agencies, non-ship work.

Source: Maritime Administration

Gulf Coast Shipyard Employment **CHART II**
(Active Base)



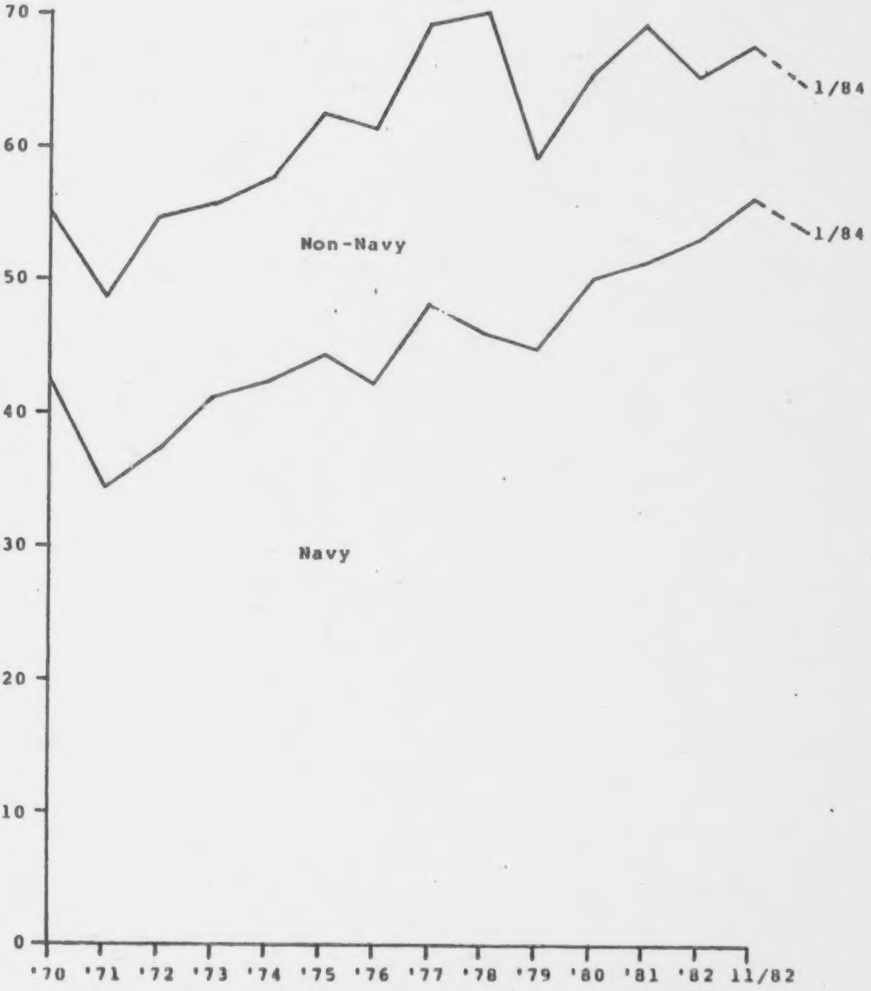
1. Total plant employment in thousands (as of January 1 in each year).

2. Non-Navy includes commercial construction and repair, MARAD, other agencies, non-ship work.

Source: Maritime Administration

CHART III

## East Coast Shipyard Employment
## (Active Base)



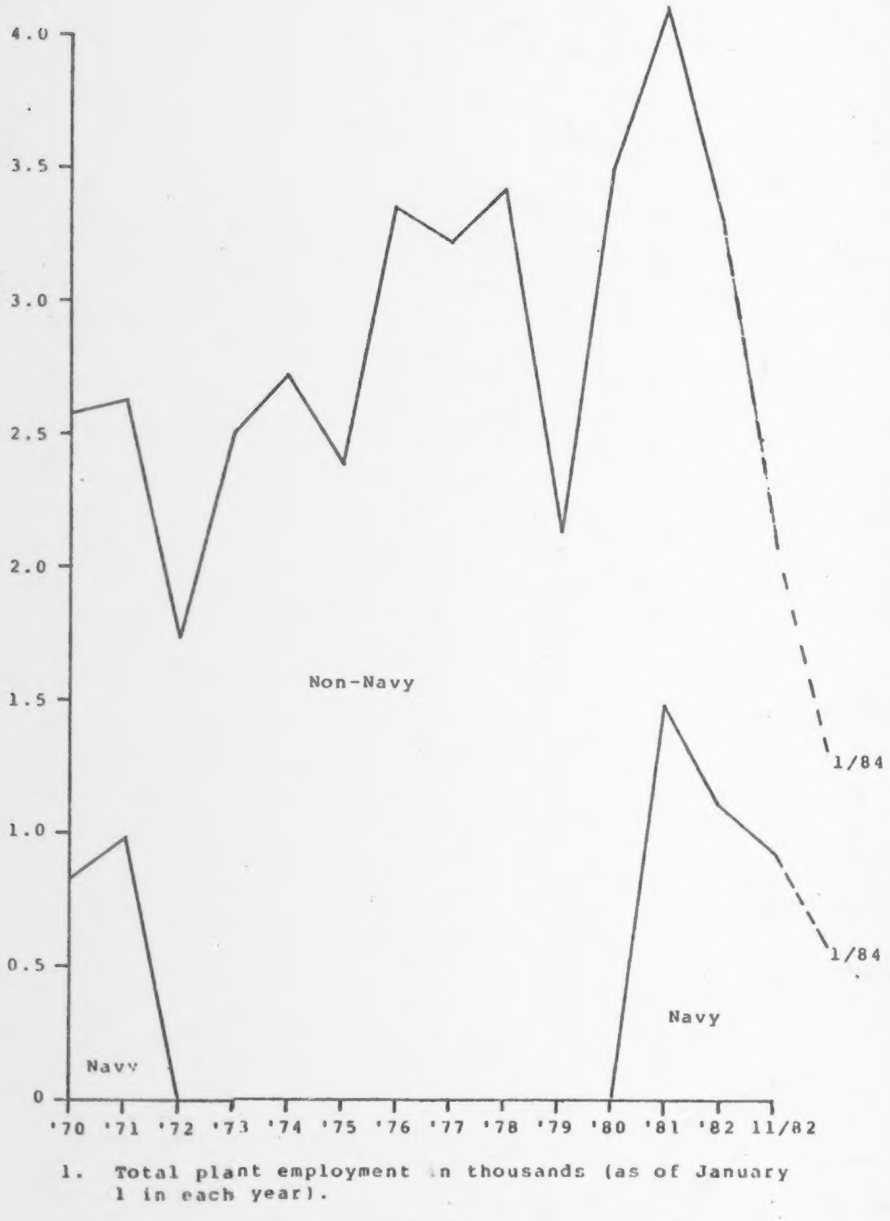
1. Total plant employment in thousands (as of January 1 in each year).

2. Non-Navy includes commercial construction and repair, MARAD, other agencies, non-ship work.

Source: Maritime Administration

Great Lakes Shipyard Employment (Active Base)

CHART IV



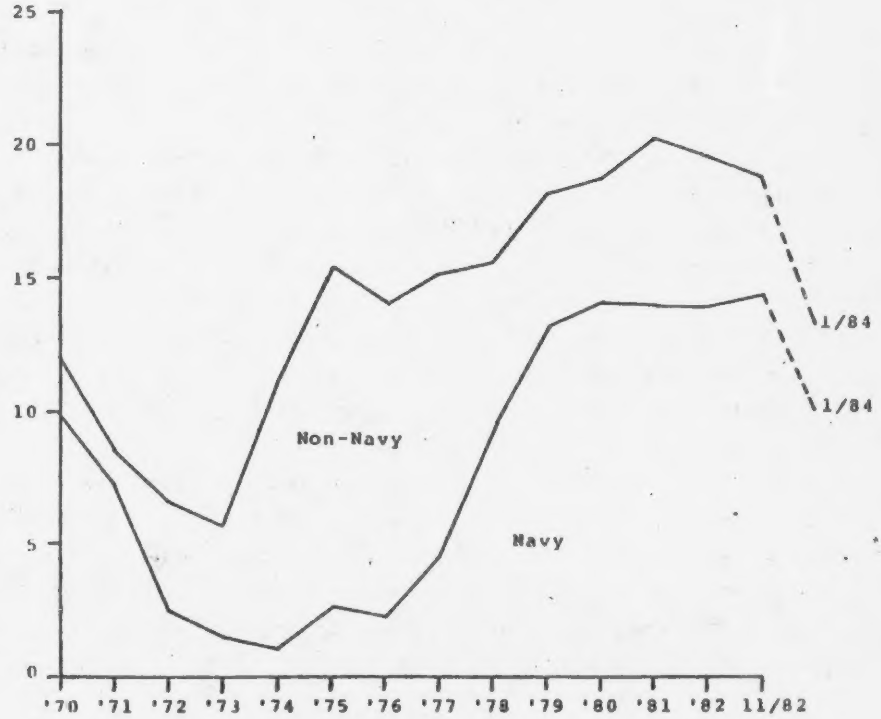
1. Total plant employment in thousands (as of January 1 in each year).

2. Non-Navy includes commercial construction and repair, MARAD, other agencies, non-ship work.

Source: Maritime Administration

CHART V

Pacific Coast Shipyard Employment
(Active Base)



1. Total plant employment in thousands (as of January 1 in each year).

2. Non-Navy includes commercial construction and repair, MARAD, other agencies, non-ship work.

Source: Maritime Administration

non-Navy work but the net decline was more than 1,600 workers. For the Great Lakes (Chart IV), the pattern of declining total employment is self-evident. Surprisingly, by these figures, the West Coast (Chart V) had a net increase in employment of about 3,500 up to late last year, but, our current projections indicate that this gain may have been completely wiped out by lay-offs in the first quarter of 1983.

This inability of the commercial sector to support the industrial base is the result of a decline not only in commercial shipbuilding but also in commercial shiprepair, as well.

The decline in commercial shiprepair activity over the past 12 months has been startling. Approximately 11 percent of the world trading fleet has been idled by reason of the continuing international and domestic shipping recession. Under these circumstances, many shipowners are deferring or limiting maintenance on existing vessels. Vessel drydock and repair demands are not materializing, and the near-term prognosis is not particularly promising. Market conditions have thereby become extremely competitive: as ship construction activity has diminished overall, some U.S. shipbuilding yards, in an effort to sustain economic viability, are shifting emphasis and workforce toward shiprepair.

Naval shiprepair and overhaul work has always been a significant market for the industry. Better than 60 percent of the private sector repair workforce, at the close of last year, was devoted to work on Navy ships, and to their credit, private shipyards have improved their performance on naval ship overhauls by an average of 45 days during the past two years.

Projections for future Navy repair workloading in private yards in the out years do not look promising, and, in fact, confidence level is limited because of the vagueness of certain considerations: dispersal considerations, increased public yard employment and naval shipyard loading for overhauls, among others.

The shiprepairing outlook will be further aggravated by the Administration's announced advocacy of legislation to repeal the 50 percent ad valorem duty on other than emergency repairs of U.S.-flag merchant vessels in foreign shipyards. As I understand Congressional intent, this tariff was originally invoked in the Tariff Act of 1930 to strengthen and preserve a shiprepairing base for mobilization.

## Summary

The combination of declining commercial workload and a reorientation of the Navy's industrial plans to support the public sector at the expense of the private sector threatens the continued viability of the Nation's private shipbuilding and shiprepair industrial base. It should be remembered that 81 percent of the Nation's shipbuilding and repair capability came from private sources at the peak of industrial activity in World War II (November 1943). Since a long-term conventional conflict with substantial warfare at sea is not implausible, then the continued health and vigor of the Nation's shipbuilders and shiprepairers should be of concern to this Committee, as it wrestles with decisions that provide this country with a total national security, not only based on weapons but also on the economic health of the people. We, as shipbuilders and shiprepairers, stand ready to assist you in the development of new programs to generate a revitalized base, because it is clear from the foregoing that the old ways and systems did not work as we had intended them to work.

What do we recommend in specific terms to the Navy's shiprepair program? Please understand that we believe the Navy yards fulfill an important function in our Nation's total industrial base capability. Navy yards form the foundation for fleet emergency repairs and nuclear ship overhauls and repair. However, we believe that the Navy should not use the private sector as a balancing mechanism when they face internal budgetary constraints. Using the private sector for balancing workload is an extremely inefficient operation. Since the Navy yards are by definition inefficient in order that they may provide responsive capabilities to the fleet commanders, we would argue that the Navy ought to use the Navy yards as a balancing mechanism and increase the share of available Navy repair and overhaul work to the private sector. As a result, the Navy would be helping to sustain the industrial base and in the process promote the efficient use of the private sector, which is fully consistent with Congressional intent in the FY 1983 Continuing Resolution Act. (See Attachment D.)

Attachment A

## Navy Yard Employment

## Full-Time Permanents Onboard

| | 8/30/82 | | 9/30/82 | | 1/30/83 | | Change |
|---|---|---|---|---|---|---|---|
| Portsmouth | 7,978 | | 8,055 | | 8,485 | | + 507 |
| Philadelphia | 9,534 | | 9,595 | | 9,966 | | + 432 |
| Norfolk | 12,041 | | 11,990 | | 12,529 | | + 488 |
| Charleston | 7,820 | | 7,780 | | 8,210 | | + 390 |
| Puget Sound | 10,943 | | 10,924 | | 11,940 | | + 997 |
| Mare Island | 9,498 | | 9,482 | | 9,967 | | + 469 |
| Long Beach | 6,876 | | 7,042 | | 7,023 | | + 147 |
| Pearl Harbor | 6,758 | | 6,615 | | 7,144 | | + 386 |
| TOTAL | 71,448 | 39% | 71,483 | 39% | 75,264 | 41% | +3,816 |
| Private[2] | 113,168 | 61% | 112,826 | 61% | 108,245[3] | 59% | -4,923 |
| GRAND TOTAL | 184,616 | | 184,309 | | 183,509 | | |

**NOTE** At the peak of industrial mobilization in November 1943:

| | |
|---|---|
| Private | 81.2% of employment |
| Public | 18.8% of employment |

---

[1] Since 8/30/82

[2] Source: Maritime Administration

[3] December 1982

ATTACHMENT B

REGULAR MEMBERS

ADDSCO Industries, Inc.
Post Office Box 1507
Mobile, AL 36601

The American Ship Building Co.
512 Florida Avenue, Suite 430
Tampa, FL 33602
Amship Division; Lorain, OH
Tampa Shipyards, Inc., Tampa, FL

Avondale Shipyards, Inc.
Post Office Box 50280
New Orleans, LA 70150

Bath Iron Works Corp.
700 Washington Street
Bath, ME 04530

Bay Shipbuilding Corp.
605 N. 3rd Avenue
Sturgeon Bay, WI 54235

Bethlehem Steel Corp.
Shipbuilding Division
Bethlehem, PA 18016
Beaumont, TX
Sparrows Point, MD

Coastal Dry Dock & Repair Corp.
Brooklyn Navy Yard
Building 131
Brooklyn, NY 11205

Dillingham Maritime Group
P. O. Box 4367
Portland, OR 97208

General Dynamics Corp.
Pierre Laclede Center
St. Louis, MO 63105
Electric Boat Division, Groton, CT
and Quonset Point, RI
Quincy Shipbuilding Division Quincy, MA
and Charleston, SC

General Ship Corp.
400 Border Street
East Boston, MA 02128

Ingalls Shipbuilding Division
Litton Industries
Post Office Box 149
Pascagoula, MS 39567

Jacksonville Shipyards, Inc.
750 East Bay Street
Post Office Box 2347
Jacksonville, FL 32203

Lockheed Shipbuilding &
Construction Co.
2929 Sixteenth Avenue, SW
Seattle, WA 98134

Marine Power & Equipment Co., Inc.
1441 North Northlake Way
Seattle, WA 98103

Marinette Marine Corp.
Ely Street
Marinette, WI 54143

Maryland Shipbuilding &
Drydock Co.
Post Office Box 537
Baltimore, MD 21203

National Steel & Shipbuilding Co.
Harbor Drive at Twenty-Eighth Street
Post Office Box 80278
San Diego, CA 92138

Newport News Shipbuilding
4101 Washington Avenue
Newport News, VA 23607

Norfolk Shipbuilding & Drydock
Corp.
Post Office Box 2100
Norfolk, VA 23501
Norfolk, VA (2 plants)
Berkeley, VA

Northwest Marine Iron Works
Post Office Box 3109
Portland, OR 07208

Savannah Shipyard Co.
Post Office Box 787
Savannah, GA 31402

Southwest Marine, Inc.
Foot of Sampson Street
Post Office Box 13308
San Diego, CA 92113

Todd Shipyards Corp.
Todd Pacific Shipyards Corp.
One State Street Plaza
New York, NY 10004
Alameda, CA,
Brooklyn, NY, Galveston, TX
Houston, TX, Los Angeles, CA
New Orleans, LA, San Francisco, CA, Seattle, WA

Tracor Marine, Inc.
Post Office Box 13107
Port Everglades, FL 33316

ALLIED INDUSTRIES MEMBERS

Bird-Johnson Co.
Walpole, MA

Borg-Warner Corp.
York Division
York, PA

Colt Industries, Inc.
Washington, DC

Combustion Engineering, Inc.
Windsor, CT

Eaton Corp.
Cutler-Hammer Products
Rockville, MD

General Electric Co.
Schenectady, NY

Hughes Aircraft Co.
Los Angeles, CA

Jamestown Metal Marine Sales, Inc.
Boca Raton, FL

Lake Shore, Inc.
Iron Mountain, MI

MacGregor-Comarain, Inc.
Cranford, NJ

Raytheon Service Company
Arlington, VA

SMATCO, Inc.
A TBW Industries Company
Houma, LA

Sperry Corp.
Marine Systems
Great Neck, NY

Transamerica Delaval, Inc.
Trenton, NJ

Ward Leonard Electric, Co., Inc.
Mount Vernon, NY

Western Gear Corp.
Everett, WA

Westinghouse Electric Corp.
Pittsburgh, PA

Worthington Pump Corp.
Harrison, NJ

NAVAL ARCHITECT MEMBERS

J. J. Henry Co., Inc.
New York, NY

John J. McMullen Associates, Inc.
New York, NY

ASSOCIATION MEMBERS

The American Waterways Operators, Inc.
Arlington, VA

New England Ship Repair Yard Assn.
East Boston, MA

New York and New Jersey Dry Dock Assn.
New York, NY

Western Shipbuilding Assn.
San Francisco, CA

AFFILIATE MEMBERS

Tomlinson Refrigeration & Supply Co.
Elizabeth, NJ

Standard Marine Services, Inc.
Bayonne, NJ

New York Protective Covering Industries, Inc.
Brooklyn, NY

C-O-Two Sales & Service
Hoboken, NJ

Ocean Electronics, Inc.
Brooklyn, NY

Terry Corporation
New London, CT

Hayward Industrial Products, Inc.
Elizabeth, NJ

Poten & Partners, Inc.
New York, NY

McNab, Inc.
Mount Vernon, NY

ATTACHMENT C

## ACTIVE U.S. SHIPBUILDING BASE

ADDSCO Industries, Inc., Mobile, AL
The American Ship Building Company, Lorain, OH
Avondale Shipyards, Inc., New Orleans, LA
Bath Iron Works Corporation, Bath, ME
Bay Shipbuilding Company, Sturgeon Bay, WI
Bethlehem Steel Corporation, Beaumont, TX
Bethlehem Steel Corporation, Sparrows Point, MD
Equitable Shipyards, Inc., Madisonville, LA
General Dynamics/Electric Boat Division, Groton, CT
General Dynamics/Quincy (MA) Shipbuilding Division
Halter Marine, Inc., Chickasaw, AL
Ingalls Shipbuilding Division of Litton Industries, Pascagoula, MS
Levingston Shipbuilding Company, Orange, TX
Lockheed Shipbuilding & Construction Company, Seattle, WA
Marinette Marine Corporation, Marinette, WI
Maryland Shipbuilding & Drydock Company, Baltimore, MD
National Steel & Shipbuilding Company, San Diego, CA
Newport News Shipbuilding, Newport News, VA
Norfolk Shipbuilding & Drydock Corporation, Norfolk, VA
Pennsylvania Shipbuilding Company, Chester, PA
Peterson Builders, Inc., Sturgeon Bay, WI
Tacoma Boatbuilding Company, Inc., Tacoma, WA
Tampa Shipyards, Inc., Tampa, FL
Todd Shipyards Corporation, Galveston, TX
Todd Shipyards Corporation, Houston, TX
Todd Pacific Shipyards Corporation, Los Angeles, CA
Todd Pacific Shipyards Corporation, Seattle, WA

October 12, 1982

## ATTACHMENT D

(In thousands of dollars)

| | Budget | House | Senate | Conference |
|---|---|---|---|---|
| CURRENCY REVALUATION | 360,613 | 253,513 | 237,413 | 253,513 |
| FLEET COMMAND & STAFF | 225,610 | 220,610 | 211,910 | 211,910 |
| SHIP/A/C MAINT & MOD | 3,104,208 | 3,000,708 | 2,950,608 | 2,950,608 |
| INTELL | 940,102 | 925,711 | 937,202 | 925,711 |
| FUEL COST REESTIMATE | 2,504,937 | 2,204,937 | 2,348,537 | 2,204,937 |
| RECRUITING & ADVERTISING | 93,530 | 77,030 | 78,530 | 77,030 |
| BASE OPERATIONS | 614,727 | 594,727 | 605,227 | 599,977 |
| REAL PROPERTY MAINTENANCE | 690,396 | 720,396 | 690,396 | 720,396 |
| EUROPE FORCE STRUCTURE | --- | --- | -10,200 | --- |
| SERVICE-WIDE TRANSPORTATION | --- | --- | 10,400 | --- |
| AIR LAUNCHED WEAPONS REWORK | --- | --- | 1,700 | --- |
| TRIDENT SUB MISSION SUPPORT | 163,321 | 163,321 | 142,321 | 142,321 |
| TRIDENT WEAPON SYSTEM SUPPORT | 162,455 | 162,455 | 147,455 | 147,455 |
| PACIFIC FLEET SUB MISSION SPT | 18,212 | 18,212 | 15,412 | 18,212 |
| BASE OPS (UNAUTHORIZED COMMISSARY SUPPORT) | --- | -4,700 | --- | -4,700 |
| P-3 FLYING HOURS | 53,035 | 53,035 | 44,035 | 44,035 |
| FLYING HOURS | 1,671,200 | 1,746,200 | 1,646,200 | 1,696,200 |
| OTHER SEA SUPPORT | 43,409 | 43,409 | 40,409 | 40,409 |
| COMPONENT CALIBRATIONS | 80,100 | 80,100 | 74,600 | 74,600 |
| TECHNICAL SUPPORT | 131,541 | 131,541 | 126,441 | 126,441 |
| TRANSFER OF LKA SHIPS | --- | --- | 4,600 | --- |
| NAVY MATERIAL COMMAND | 23,500 | 23,500 | 21,500 | 21,500 |
| CONSULTANTS, STUDIES & ANALYSES | 345,195 | 320,195 | 295,595 | 320,195 |
| TRAVEL | 291,772 | 290,872 | 262,572 | 262,572 |
| RAPID DEPLOYMENT FORCE | --- | --- | -31,200 | --- |
| PERSONNEL SECURITY CLEARANCE PROCESSING | --- | -7,000 | --- | -7,000 |
| SLUC CHARGES | --- | -19,200 | --- | -19,200 |
| PATIENT CARE FUNDING REALIGNMENT (TRANSFER) | --- | -32,000 | --- | --- |
| ENERGY CONSERVATION | --- | -15,000 | --- | -15,000 |
| STOCK FUND CASH | --- | -100,000 | --- | --- |
| INDUSTRIAL PLANT EQ CHG | --- | -70,000 | --- | --- |
| NONFOREIGN COLA | --- | -8,000 | --- | --- |
| LEGISLATIVE LIAISON | --- | -200 | --- | -200 |
| INDUSTRIAL WORKLOAD CARRYOVER | --- | -26,600 | --- | -26,600 |
| PUBLIC AFFAIRS | --- | -500 | --- | -500 |
| JCS EXERCISES | 2,900 | 2,900 | --- | --- |
| NAVY REMOTE WAR GAMING | --- | -200 | --- | -200 |
| TAGOS SLIPPAGE | --- | -2,600 | --- | -2,600 |
| END STRENGTH TAIL | --- | -8,000 | --- | -8,000 |
| PER DIEM EQUITY | --- | -13,600 | --- | --- |
| SHORESTAMPS | --- | 5,600 | --- | 5,600 |
| ID CARD SLIPPAGE | --- | -2,400 | --- | -2,400 |
| COMMUNICATIONS | --- | -3,000 | --- | -3,000 |
| FMS SURCHARGE | --- | -35,000 | --- | -35,000 |
| PAY RAISE | 281,253 | 168,753 | --- | 168,753 |
| ITEMS NOT IN CONFERENCE | 10,312,037 | 10,190,937 | 10,190,937 | 10,190,937 |
| TOTAL, OPERATION AND MAINTENANCE, NAVY | 22,314,253 | 21,050,862 | 21,043,400 | 21,079,712 |

The following items represent language as agreed to by the conferees:

*Ship overhaul and repair.*—The Conferees recognize that the Navy has had some difficulty staying within budgeted schedules and costs for complex ship overhauls in the past. In part, this difficulty has been caused by erratic workloading of Navy yards and the inability to qualify private sources for overhaul of complex surface combatants and their associated subsystems.

The expanding ship overhaul program will force the Navy to utilize fully qualified private shipyards and subcontractors to a greater extent than in the past. In order to accommodate this expanding workload, Navy should certify those private shipyards holding commercial master ship repair licenses and nuclear certification and establish a procedure to qualify firms to act as master ordnance repair facilities. This action will guarantee a fully qualified private sector capability.

As directed by the Senate Committee, the Navy will report to the Congress on its assessment of the total demands on the shipbuilding industrial base resulting from naval and commercial new construction and repairs. In addition, the Navy will provide the Congress with a quarterly assessment of actual inductions and obligations compared to the budgeted overhaul plan. Furthermore, the Navy should include in the overhaul account, the costs for provisioning and berthing crews on ships and submarines in overhaul. With regard to the Fleet Modernization Program, the Navy is expected to include in the FY 1984 budget submission, the actual cost to install alterations.

Finally, within the amount provided, the active Navy shall pay the costs of the overhaul of the USS *Mobile* being transferred from the Navy Reserve, and provide reimbursement to the Navy Reserve for the cost of said vessel.

*Administration of shipbuilding and maintenance.*—The conferees agree that the Navy should review the feasibility of transferring the administrative costs of shipbuilding and maintenance to the procurement accounts as requested by the Senate. However, the conferees agree that the Department is not to make any change in the present method of budgeting for these costs without specific congressional guidance to do so.

## OPERATION AND MAINTENANCE, MARINE CORPS

The conferees agree to the following amounts for Operation and Maintenance, Marine Corps:

(In thousands of dollars)

| | Budget | House | Senate | Conference |
|---|---|---|---|---|
| FUEL COST REESTIMATE | 50,694 | 44,694 | 50,694 | 44,694 |
| CURRENCY REVALUATION | 101,889 | 72,489 | 64,789 | 72,489 |
| REAL PROPERTY MAINTENANCE | 225,793 | 245,793 | 225,793 | 245,793 |
| RECRUITING & ADVERTISING | 56,089 | 49,589 | 51,089 | 49,589 |
| CIVILIAN PERSONNEL | --- | --- | -1,500 | --- |
| LVT-7 REPAIRS | 6,840 | 6,840 | 40 | 6,840 |
| HOUSEHOLD GOODS STORAGE | 2,230 | 2,230 | 430 | 2,230 |
| EMERGENCY LEAVE | 220 | 220 | 20 | 220 |
| CONSULTANTS, STUDIES & ANALYSES | 31,166 | 21,166 | 19,866 | 21,166 |
| TRAVEL | 67,148 | 67,148 | 56,648 | 67,148 |
| MARINE CORPS TRUCK RETROFIT | --- | -500 | --- | -500 |
| PERSONNEL SECURITY CLEARANCE PROCESSING | --- | -500 | --- | -500 |
| PER DIEM EQUITY | --- | -6,000 | --- | --- |
| ENERGY CONSERVATION | --- | -5,000 | --- | -5,000 |
| INDUSTRIAL PLANT EQ CHG | --- | -2,800 | --- | --- |
| BASE OPS (UNAUTHORIZED COMMISSARY SUPPORT) | --- | -300 | --- | -300 |
| PUBLIC AFFAIRS | --- | -100 | --- | -100 |
| MARINE CORPS O&M SHORTFALL | --- | 33,500 | --- | 33,500 |
| DISABILITY COMPENSATION | --- | -700 | --- | --- |
| LAV SLIPPAGE | --- | -2,200 | --- | -2,200 |
| PAY RAISE | 10,571 | 11,171 | --- | 11,171 |
| ENVIRONMENTAL AND MORALE LEAVE | 200 | 200 | --- | --- |
| ITEMS NOT IN CONFERENCE | 939,531 | 935,431 | 935,431 | 935,431 |
| TOTAL, OPERATION AND MAINTENANCE, MARINE CORPS | 1,500,371 | 1,472,371 | 1,403,300 | 1,481,671 |

### REPAIR WORK

Senator **Stevens**. You represent the Shipbuilders Council, right?

Mr. **Stocker**. Yes, sir.

Senator **Stevens**. And they do the repair work also?

Mr. **Stocker**. Yes, sir.

Senator **Stevens**. You are speaking directly to repair work this morning?

Mr. **Stocker**. Yes, sir.

Senator **Stevens**. And the non-Navy portion of the in work the repair yards is limited to U.S.-built vessels, is it not? I mean, do not we have ourselves in sort of a dichotomy here because your council opposes the use of foreign-flagged vessels and yet the very fact that the foreign-flagged vessels are being used more and more in international trade, that is leading to the decline of the use of your parent facilities?

Mr. **Stocker**. In the past, up until about 2 to 3 years ago, U.S. shipyards, ship repair facilities, performed many repair jobs on foreign-flagged vessels as well as U.S.-flagged vessels.

There has been a sharp decline not only because of the recession in international trades over the past couple of years but also because foreign governments are subsidizing their shipyards and ship repair facilities for the performance of repair work as well as new construction.

Senator **Stevens**. Also because of the declining volume have not your people just sort of been priced out of the market as far as repairs are concerned for foreign-flagged vessels?

Mr. **Stocker**. We have been priced out of the market, Mr. Chairman, because foreign governments have been willing to subsidize their own yards for repair work in addition to new construction.

This is a relatively new development that has taken place within the last 18 to 24 months.

Senator **Stevens**. It would be interesting to have any information you have about the extent of those subsidies.

Mr. **Stocker**. We would be glad to provide some comments for the record, Mr. Chairman.

Senator **Stevens**. Thank you, very much. I appreciate your time and apologize for the problem yesterday. We just could not get to you the other afternoon.

Mr. **Stocker**. Thank you for the opportunity to appear.

Senator **Stevens**. Next, Capt. Roy Moody, the Director of Naval Affairs, the Reserve Officers Association of the United States.

## Reserve Officers Association of the United States

## STATEMENT OF CAPT. ROY MOODY, DIRECTOR OF NAVAL AFFAIRS, RESERVE OFFICERS ASSOCIATION OF THE UNITED STATES

### INCREASED SUPPORT FOR RESERVE FORCES

Captain **Moody**. Mr. Chairman, it is a pleasure to appear before the committee and represent the Reserve Officers Association. I will certainly try to summarize my comments briefly and stay within the time allocated. As a result, however, there are certain items in our statement that I am just simply not going to mention;

our support for portal-to-portal pay for reservists, GI bill incentive pay for Reserve medical personnel and so forth.

Senator STEVENS. That will be in the record in full.

Captain MOODY. Yes, sir. We hope that you will recognize our support for those.

In past years we have recommended congressional action to provide better and more modern equipment for the Reserve forces as an economical way to maintain adequate Armed Forces.

As Secretary Weinberger recently stated, "it is clearly incumbent upon us to provide the Reserves the training and the equipment that they require to accomplish their mission." Nevertheless, in the 1984 budget, funding requested for the Reserve is the only major portion of the defense budget which shows no increase over 1983.

## ARMY RESERVE

I would like to move to the Army Reserve now. If you look at the Army Reserve's total end strength request it looks like a nominal increase of about 4,400. However, if you look at it closely you realize that the Army has really frozen their drill pay strength in 1984 at the 1983 level.

And with the Army Reserve some 50,000 short of wartime requirements, we believe it is a false economy for the Army to freeze the strength of the Selective Reserve in 1984 and accordingly we recommend the Congress increase the Army Reserve paid drill strength by 10,000.

The command and control structure of the Army Reserve still remains an item of major concern. In the Public Law 90-168 it is stated that the Chief of the Army Reserve should be the functional manager of his component, and under the Chief of Staff of the Army have control of funds and programs for the Army Reserve.

There have been quite a few positive improvements to the Chief of Army Reserve's role as a functional manager resulting from the Department of Army actions. However, the enhancements still, in our opinion, do not begin to fulfill the changes needed to make the Chief of Army Reserve the functional manager of the programs as intended by the Congress.

We recommend that to fully implement the 1967 mandate of the Congress, that management structure for the Army Reserve would assign to the staff of the Forscom Headquarters and to each of the continental Army commands an Army Reserve, Selected Reserve general officer with accompanying, of course, Active Guard and Reserve staff.

## CAPSTONE PROGRAM

The Capstone program has proven to be a most beneficial Army initiative. This program alines Reserve component units with the Active component units so that they train and plan in peacetime with the command that they would deploy and fight with in wartime.

However, if you look at the funding request, you will find that there is only 235 Reserve units provided for in this training program for 1984.

At that rate it would take some 13 years for each unit in the Army Reserve to train one time under the Capstone program.

Accordingly, we urge the Congress to increase the travel fund levels for this training program by some $2 million in 1984.

### EQUIPMENT

In the area of equipment, we continue to be very concerned with the urgent need to significantly increase the delivery schedule of modern, new and compatible equipment to the Army Reserve.

Currently the Army Reserve has only 34 percent of the equipment required for mobilization. And over the course of the last 3 years Congress has earmarked some $175 million additional for Army Reserve equipment. We certainly believe that it is clearly desirable that this practice must continue.

### NAVAL RESERVE

In the Naval Reserve we are most encouraged by actions taken by the Navy. And support of the Naval Reserve is reflected in the 1984 budget submission. The Navy's current policy of horizontal integration of equipment into the Naval Reserve really puts the Navy in the forefront of service support for a Reserve component at this time.

And in the strongest possible terms we urge continued congressional support of these Navy initiatives.

Of course, we do believe some additional things can be done to even more enhance the effectiveness and mobilization readiness of the Naval Reserve.

The Navy manpower mobilization system, for example, indicates a requirement for about 124,000 selected Naval Reservists by the end of fiscal year 1987. The current strength is about 93,000, which is a required growth, obviously, of about 31,000.

We feel that Congress should fund the Selective Naval Reserve to take advantage of today's economic conditions and increase to an end strength of 110,000 or a man-year average of 105,000 by the end of 1984.

We estimate that these additional numbers would cost approximately $21 million over the administration's budget.

The need to maintain an organic Navy tactical airlift capability has been addressed repeatedly over the past few years. The need is codified in 10 United States Code 5012 and certainly has been verified through congressional hearings and through Navy and OSD studies.

The Navy has requested $21.3 million in the 1984 budget which will support the lease of between 8 and 10 used DC-9's. However, under today's leasing costs, it appears that the entire purchase price will have been paid out in about 2½ to 3 years. We recommend that the Congress fund the purchase of 10 used DC-9 aircraft for 1984 at a total cost of approximately $78 million.

The program to modernize the ASW capability of the surface, land-based patrol aircraft involves installation of a tactical navigation modernization kit in the P3-A/B aircraft.

With the 19 kits that have been requested by the Navy in 1984, 40, a P3-A/B aircraft, still remain outside the modernization program.

We recommend that an additional 17 be funded in 1984 at a cost of about $21 million.

### NAVAL RESERVE CARRIER AIR WINGS

Probably our most serious concern right now in the Naval Reserve is the need to upgrade and modernize equipment in the Naval Reserve Carrier Air Wings. The compatibility gap between these aircraft and those flown in the fleet grows wider at an alarming rate.

This is particularly significant because the aircraft carriers to which these air wings would mobilize simply would not be able to support the newly arrived Reserve aircraft. That fact has been recognized by both the Secretary of the Navy and the Chief of Naval Operations. The Navy intends to modernize the Reserve Tactical Air Squadrons as early as possible with the introduction of F/A-18's, E2C's, and A6E aircraft.

However, we keep hearing disturbing rumors that some congressional personnel do not support introduction of F/A-18 aircraft into the Naval Reserve.

We have heard comments such as, "If the Navy can waste funds putting F/A-18's through the Naval Reserve, they obviously have too much money in their budget."

Mr. Chairman, we ask your unqualified support for the Navy's program of horizontal integration of equipment into the Naval Reserve.

The Congress has long condemned the Active Forces for their lack of equipment support for the Reserve components.

Now that the Navy has moved to the forefront, we are very concerned that there is some attempt to undercut these essential initiatives.

In the area of mine warfare, our total surface mine warfare inventory today consists of 21 old and obsolete MSO's.

As a frame or reference, we had several hundred MCM ships in commission during World War II. Obviously, the numbers today are totally inadequate.

The current plan is that the 3 active fleet and 18 Naval Reserve Force MSO's will be phased gradually out of commission during the next 8 years as 14 new MCM and 17 new MSH ships join the fleet for further transfer to the Naval Reserve Force.

### MCM SHIPBUILDING PROGRAM

Again, however, we keep hearing rumors from House and Senate Armed Services and Appropriations Committee sources that the MCM shipbuilding program is in trouble.

We strongly support the administration's plan to build two new carriers. However, even without these carriers the United States still possesses a tremendous big deck carrier capability. But failure to build these proposed MCM ships will essentially leave the United States without any surface mine countermeasure capability.

We strongly urge the Congress to approve funding for procurement of the four follow-on MCM ships that are in the budget and further that the lead ship of the MSH-1 class, which is also in the budget, be approved.

### ARAPAHO

During the Falkland Islands war the Royal Navy used some 45 merchant ships, 19 of which were fitted to operate helicopters. Admiral Small, the Vice Chief of Naval Operations, testifying recently, noted that more effort was needed to develop self-defense, aviation and other naval systems for merchant ships so employed. In this context Admiral Small stated Arapaho has proved to be a feasible operation.

Briefly, Arapaho is a convoy protection system which places ASW helicopters onboard merchant ships. We strongly urge that Congress approve funding for final testing, evaluation, and production of Arapaho.

### MARINE CORPS RESERVE

Moving to the Marine Corps Reserve, as has been the case for the last 2 years, the Marine Corps Reserve manpower requirements appear to be well provided for in the fiscal year 1984 budget request and we certainly support that.

The material readiness of the Marine Corps Reserve, 4th Division Wing Team, however, is a matter of major concern. They simply don't have the necessary equipment, repair parts, consumables and so forth which they must have on mobilization.

The fiscal year 1982 shortfall to this area was some $684 million. It has been reduced to a current shortfall of about $645 million. We strongly believe that we have to take immediate efforts to significantly reduce and eliminate the shortages; otherwise, while our Marine Corps Reservists are well trained and ready for mobilization, sustainability over any prolonged period obviously is out of the question.

We strongly support Marine Corps efforts to modernize the Reserve combat forces, ground combat forces. However, much of what I stated earlier about the Naval Air Reserve applies equally to the Marine Corps Air Reserve. Many Marine Air Reserve squadrons deploy to aircraft carriers on mobilization. Here again we must start moving to our new procurement of identical equipment for both the Reserve and active duty Marine Corps.

It is just a matter of fact the carriers, no matter how big they are, have a limited amount of capacity and capability to support a maximum number of aircraft and we can't give them additional aircraft of a different type on mobilization. They just simply cannot support them. They have to be identical to what is currently being flown and supported in the fleet.

Congress has previously directed establishment of two Marine Air Reserve KC-130 aerial refueler-transport squadrons.

However, none are requested in the 1984 budget and still leaving a total of 15 to be procured to meet the congressional mandate. We recommend funding to procure some four additional KC-130 aircraft by the Marine Air Reserve in 1984.

The urgent need is to increase the helicopter anti-armor capability in the Marine Corps Reserve. Only the AH-1T (TOW) helicopter has an antitank capability.

Accordingly, we recommend that Congress seriously look at procurement of the AH-1T helicopter immediately for the Marine Corps Air Reserve.

### AIR FORCE RESERVE

Moving, finally, to the Air Force Reserve, they have achieved new levels of strength and readiness during the past year.

Among the key personnel in maintaining mission unit readiness are the Air Reserve technicians.

The high skill level and stability of these employees is critical in sustaining the Air Force Reserve's operational readiness.

In the conference report on House Joint Resolution 631, concern was expressed by the conferees that proposed fiscal year 1983 conversions of military technicians to active guard Reserve personnel was principally responsive to the requirement to reduce the number of civilian personnel to meet civilian personnel ceilings.

We believe that the most simple and effective way to achieve the objectives of Congress in this matter is to budget for military technicians as separate line items in the table of full-time Reserve manpower.

If, in the interest of economy, the Congress determines a need to shift a portion of the total force from the active to the Reserve Forces, we would recommend the following candidates for the Air Force Reserve.

Air Force Reserve Associate Squadrons are currently flying active force C-141's and C-5's. Equipping selected Air Force Reserve Associate Squadrons with C-141's and or C-5's would be operationally and economically sound since most of the required trained air crews and maintenance personnel are already in place.

In the tactical area selected Reserve C-130 squadrons could be fully equipped with 16 aircraft per squadron rather than the current 8.

Similarly, Reserve fighter squadrons could be equipped with 24 aircraft per unit like their Active Force counterparts rather than the current 18. All of these options represent savings in operating, personnel, and overhead costs.

We appreciate that Congress has recognized the need for modern tactical aircraft in the Air Reserve forces by adding some 38 C-130H aircraft to the DOD budget through 1982. However, only six of these aircraft have gone to the Air Force Reserve. Even these six are two short of the number required to bring the receiving unit at Dobbins Air Force Base, Ga., up to minimum strength.

We urge that Congress include two aircraft for Dobbins over and above any other C-130H procurement for the Air Force Reserve.

In the tactical fighter mission, the Air Force Reserve is building from 8 squadrons in fiscal year 1981 to 11 squadrons in fiscal year 1984. Five of these units will be equipped with F-4 aircraft, five with A-10's, and one with F-105's.

While the F-4's are new to the Air Force Reserve, they are old aircraft. The average age of the Air Force Reserve F-4's exceeds 13 years. The cost of maintaining and operating these aircraft is considerably higher than an F-16.

Total operations and support cost are almost 22 percent less for an F-16-equipped wing compared to an F-4 wing.

As with the C-130A, a comprehensive program for the modernization of the Air Force Reserve fighters is also necessary.

In summary, the Air Force Reserve wartime mission is expanding. With your continued support in providing modern equipment, the Air Force Reserve will continue to maintain its superb readiness and combat capability.

I thank you for the opportunity to appear before you and represent the views of the Reserve Officers Association.

[The prepared statement of Maj. Gen. J. Milnor Roberts follows:]

Reserve Officers Association of the United States

**Statement of**

**Major General J. Milnor Roberts, AUS (Retired)**

**Executive Director**

Mr. Chairman and Members of the Committee:

It is a pleasure to appear before this Committee once again, and on behalf of the Reserve Officers Association, I wish to extend our thanks for this opportunity.

In past years, we have recommended Congressional action to provide better and more modern equipment for Reserve Forces as an economical way to maintain adequate armed forces in a dangerous world. That philosophy is just as valid today, and the wisdom of action along these lines is now obviously apparent.

As Secretary Weinberger stated in remarks to the Interallied Confederation of Reserve Officers in August, 1982: "We can no longer consider Reserve Forces as merely forces in reserve. We think, instead, they have to be an integral part of the Total Force both within the United States and within NATO." He added, "It's clearly incumbent upon us to provide the Reserves the training and the equipment that they require to accomplish their mission.... Without adequate equipment, Reserve Forces can be neither credible nor effective in combat and we in the United States are making particular efforts now to insure that our Reserves and our National Guard units are equipped with the latest of tanks and weapons, planes of all kinds."

Unfortunately, the 1984 Defense budget submitted by the Administration, fails to match the sentiment expressed by Secretary Weinberger. FUNDING REQUESTED FOR RESERVES IS THE ONLY MAJOR PORTION OF THE DEFENSE BUDGET WHICH SHOWS NO INCREASE OVER 1983. This means a net reduction, in real terms, since there will be some inflation, however modest.

Such a policy makes absolutely no sense when it is well known that Reserve Forces are the most economical source of units when they are properly equipped and trained. At a time when the Defense Budget is under heavy attack, it would appear to be appropriate to increase reliance on Reserves and that means providing them with suitable equipment.

The equipment posture of most of the Reserve Forces, expecially the Army, is appalling. The figures speak for themselves as will be noted in subsequent sections of this statement. And it should be understood that all too often, Reserve units which are rated C-1 -- highest readiness posture -- are actually at a disadvantage since they are equipped with obsolete or obsolescent items.

In starting to correct this situation, we recommend that this Committee seriously consider "fencing" the items for Reserve use since past experience has shown that items designated for Reserve use may be diverted for other recipients.

## THE ARMY RESERVE

The Congress has been requested to provide $2.103 billion in obligational authority to fund the Army Reserve's programs in Fiscal Year (FY) 1984. The following chart compares the Army Reserve budget request for FY 1984 with obligations for the last two years.

($ in Millions)

| | FY 82 Actual | FY 83 Estimate | FY 84 Request |
|---|---|---|---|
| Reserve Personnel Army | 1,071 | 1,247 | 1,387 |
| Operations and Maintenance | 666 | 705 | 663 |
| Military Construction | 65 | 42 | 53 |
| TOTAL PROGRAM | 1,802 | 1,994 | 2,103 |

### Personnel Strength

Although the Army Reserve's total Personnel End Strength statistics shown below reflect a nominal increase of some 4,400 for FY 84 over FY 83, analysis of the composition of the component categories of personnel shows that the Army actually has frozen paid drill strength in FY 84 at the FY 83 level. Full-time active duty personnel to assist in organizing, administering, recruiting, and training the Army Reserve, will increase by 2,413 in FY 84, while an increase of 2,118 over FY 83 is requested in the IMA category.

RESERVE PERSONNEL, ARMY
(End Strength)

| | FY 82 Actual | FY 83 Estimate | FY 84 Request | Increase (Decrease) |
|---|---|---|---|---|
| Paid Drill Strength | 242,921 | 251,680 | 251,545 | ( 135) |
| Active Duty Strength | 5,894 | 8,251 | 10,664 | 2,413 |
| Individual Mobilization Augmentees (IMA) | 7,844 | 8,600 | 10,718 | 2,118 |
| TOTAL | 256,659 | 268,531 | 272,927 | 4,396 |

With the Army Reserve 50,000 short of wartime requirements, ROA believes it is false economy for the Army to freeze the strength of the Selected Reserve in FY 84. Further, there currently is a favorable recruiting market. With annual salary costs of an Army Reservist amounting to only 25 percent of that of an Active Component soldiers, ROA recommends that the Congress increase the FY 84 paid drill end strength of the Army Reserve by 10,000 with required funding to support the increase. This increase, if offset Army-wide, would be cost beneficial, upgrade the quality of soldiers in the Army Reserve and enhance mobilization readiness.

ROA strongly supports the Selected Reserve Incentive program established by Congress to improve Reserve Components enlisted strength and readiness. The programs in FY 82 resulted in 10,757 enlistment contracts with new soldiers channeled into high priority units and into critical MOS's. ROA believes that the Congress should continue to support this two-pronged bonus/educational assistance program which attracts qualified applicants who upgrade the readiness status of Army Reserve troop units, while at the same time increasing the retention of high caliber soldiers.

## Recruiting

In testimony before the Congress, LTG Maxwell Thurman, Deputy Chief of Staff for Personnel, expressed satisfaction with the high academic quality of the soldiers being recruited into all components of the Army, as shown in the following chart.

PERCENTAGE OF HIGH SCHOOL GRADUATES RECRUITED

| | FY 81 | FY 82 | Increase |
|---|---|---|---|
| Active Army | 71.0 | 86.0 | 15.0 |
| Army National Guard | 63.7 | 68.4 | 4.7 |
| Army Reserve | 61.4 | 64.9 | 3.5 |

ROA agrees with General Thurman that combat readiness and the ability to meet the challenges of the modern, complex battlefield, depend upon talented soldiers. This is especially true for personnel in combat support and combat service support units which form the major part of the Army Reserve. The above comparative statistics portray a less than acceptable percentage of high school graduates in Army Reserve units. This short-fall of competent soldiers adversely affects the capability of the Army Reserve of upgrade readiness for mobilization. ROA therefore urgently recommends that this committee require Department of the Army to significantly increase the quality of the recruits for the Army Reserve.

## Promotion of Army Reserve Officers on Active Duty

Existing law precludes commissioned Army Reserve Officers who are promoted in the Army Reserve while serving on active duty (other than for training) from serving in the higher grade while on active duty. They must either leave active duty or accept an appointment in a temporary grade equal to the grade in which they were serving before the promotion. An Air Force Reserve Officer in a similar situation may be ordered to serve on active duty in the higher Reserve Grade to which he was promoted.

ROA's membership fully supports legislative action to correct this inequity. In that regard, the Senate Armed Services

Committee introduced an amendment to the Uniformed Services Pay Act of 1982 (in Report 97-565 which accompanies S2936), which would amend section 3380 of Title 10 (applicable to Army Reserve Officers) so that it is similar to the provisions of section 8380 of Title 10, which is applicable to Air Force Reserve Officers. Unfortunately, the Continuing Resolution Authority for 1983 did not contain this provision. ROA strongly recommends that a bill (S989) recently introduced by Senator Jepsen be favorably considered and enacted.

Command and Control Structure of the Army Reserve

The Congress has shown an extraordinary degree of forbearance with Department of the Army's 15 year record of failing to implement the clearly expressed intent of Congress in Public Law 90-168 that the Chief Army Reserve should be the functional manager of his component, and under the Chief of Staff of the Army have control of funds and programs for the Army Reserve. Secretary of Defense James R. Schlesinger, expressed his understanding with the intent of Congress in a memo dated 23 August 1973 issued to the Secretaries of the Military Departments and Service Chiefs. In this memorandum, Secretary Schlesinger stated:

> "The Chiefs of the National Guard and Reserve Components will be the staff level managers of the Guard and Reserve programs, budgets, policy, funds, force structure, plans, etc. They will be provided with authority, responsibility and means with which to accomplish their functions effectively. The overall management responsibility of the Chiefs of the Selected Reserve, under the Service Chiefs, will be supported by all other appropriate staff agencies." (Emphasis added.)

He prefaced this remark with the following:

> "At the military level, the Navy has been given specific guidelines for developing the new Office of Chief of Naval Reserve. The Air Force and Marine Corps management structure has produced

> combat readiness and that is the vital task. I expect that the Army's reorganization, with strong command emphasis and good selection of leaders will produce demonstrably visible improvement and I shall follow the results with interest."

Similar interpretations of P.L. 90-168 have been rendered by others, including Senators Stennis and Thurmond and various Congressmen.

Finally, in December 1982, and only as a result of specifically directed pressure exerted by the Congress, the Secretary of the Army informed the Congress that the nine Army Readiness and Mobilization Regions would be eliminated. It would, however, be necessary to activate two additional Continental US Armies (CONUSA's) to decrease the present over-extended span of control problem. It is interesting to note that far from relinquishing responsibilities to the Army Reserve, this solution, after 15 years, actually increased the day to day Command and Control of the Army Reserve by the Active Component.

In a subsequent memorandum to the Senate Armed Services Committee, the Secretary of the Army announced a list of enhancements to the position of Chief, Army Reserve.

There is a very positive improvement to the CAR's rôle as a functional manager in the first enhancement which establishes a discrete office, reporting directly to OCAR, with responsibilities for IRR, IMA and AGR personnel management functions, including maintenance of individual MOS qualifications in accordance with priorities and programs established by FORSCOM. It would also include personnel management counseling for members of TPU's.

The other changes made also to varying degrees enhance involvement by the CAR in progarms for which he, as budget manager, is responsible. However, the enhancements still do not begin to fulfill the changes needed to make the CAR the functional manager of the programs he must defend and support before the Congress.

To finally implement the 1967 mandate of Congress, ROA strongly advocates a management structure for the Army Reserve that would assign to the staff of FORSCOM headquarters, and each of the CONUSAS and appropriate major Army Headquarters, a USAR Selected Reserve General Officer with existing AGR Staff. These officers would be directed to gather and provide the CAR with the functional date required to fulfill his responsibilities. We believe this approach is both cost beneficial, and because it uses the existing structure, will minimize turbulence and avoid the concerns of the active component with possible fragmentation of command responsibilities in the Army.

The CAPSTONE Program

The CAPSTONE program has proven to be a most beneficial Army initiative. The program aligns Reserve Component units based on United States Army Europe's wartime requirements in order to develop a methodology that permits Active Component and Reserve Component units to train and plan in peacetime with the command they will deploy and fight with in wartime. This single initiative has focused training on wartime mission and has certainly improved Reserve Component readiness. We at ROA are very much concerned that this most important training program and others such as the scheduled Gallant Eagle Exercises which develop readiness to the sharpest degree, will be endangered by restricting the level of training travel funds needed to realistically implement the programs. To our knowledge current travel funding supports CAPSTONE training for some 235 Reserve units in FY 1983. At this rate it would take thirteen years for each unit in the Army Reserve to train once under the CAPSTONE program. ROA urges the Congress to increase travel fund levels for training support by $2 million in FY 1984 so that each unit has the opportunity to train with its active component unit at least once every three years. For those units with a Rapid Deployment Force mission, this readiness training should be budgeted annually.

## Full Time Unit Support Program

The FY 84 RPA budget includes a request to fund an end strength of 10,664 full-time active duty personnel to assist in organizing, administering, recruiting and training the Army Reserve. This represents a sizeable increase over the 5,894 full-time active duty personnel on board in FY 82 and the 8,251 programmed for FY 83. ROA shares the concerns of the Congress with the many problems that have surfaced during the implementation of the full-time support and manning program. The military technician RIF's that were scheduled last year, and then aborted, double slotting in TO & E units, full-time assignments to TO & E units of people who would not deploy with the unit on mobilization, assignments without consultation with the unit commanders, and the absence of a realistic career management program for the full-time personnel, are just some of the problems symtomatic of a program that sorely needs top level DA attention on a priority basis. ROA, supports the wise course mandated by the Congress to control tampering with the military technician program. This oversight function should be maintained and cost effectiveness and increased unit readiness should be the justification factors for implementation of this vital program.

## Equipment

ROA continues to be concerned with the urgent need to significantly increase the delivery schedule of modern, new and compatible equipment to the Army Reserve. As of September 1982, the USAR had on hand $2.2 billion of equipment, which is $4.2 billion short of wartime requirements totalling $6.4 billion. In terms of percentages, the USAR has only 34 percent of the equipment required upon mobilization. The following table categorized USAR equipment statistics as of September 30, 1982.

## ARMY RESERVE EQUIPMENT STATUS
(Dollar Value in $000 End 4th QTR, FY 82)

| Commodity | Wartime Requirements | On-Hand | Required Shortages |
|---|---|---|---|
| Communications-Electronics | $ 582,959 | $ 134,436 | $ 472,606 |
| Tank-Automotive | 3,694,784 | 1,144,145 | 2,643,222 |
| Aviation | 766,321 | 373,755 | 443,835 |
| Weapons | 585,096 | 238,480 | 355,294 |
| Missile | 91,236 | 18,220 | 76,750 |
| Other | 733,625 | 268,464 | 526,642 |
| TOTAL | $6,454,021 | $2,177,627 | $4,516,349 |

We have learned that the Army Reserve, through the Fiscal Year 1988 time-frame, is projected to receive $1.4 billion of new end item equipment. Even assuming no factor for obsolescence, the USAR at the end of FY 1988, with on-hand equipment valued at $3.6 billion, will still be 44 percent short of current wartime requirements. It is noted that $750 million of the projected equipment is not due for delivery to the USAR until FY 1987 and 88. The following table reflects dollar value of projected deliveries of newly procured equipment to the USAR.

| FY 82 | FY 83 | FY 84 | FY 85 | FY 86 | FY 87 | FY 88 |
|---|---|---|---|---|---|---|
| $172.5M | 80.5 | 135.4 | 229.4 | 117.7 | 257.2 | 462.5 |

The above statistics clearly reveal the critical nature of the Army Reserve equipment status. Since the Active Army's combat support and combat service support requirements primarily are provided by units of the USAR, the success or failure of military operations will depend upon the readiness posture of Army Reserve units. The majority of USAR units will be deployed within 60 days after mobilization. It follows therefore that neither 34 percent currently, nor 56 percent projected in FY 1988 are acceptable equipment readiness postures for the Army Reserve units.

Over the course of the last three years, the Congress has taken note of this most serious problem and has ear-marked some $175 million for USAR equipment. We believe it is clearly desirable that the same practice continue. However, we would strongly recommend that the Department of the Army be required to provide this committee with a definitive plan for achieving an acceptable level of equipment readiness for USAR units on an accelerated basis.

## NAVAL RESERVE

ROA is most encouraged by actions taken by the Navy in support of the Naval Reserve as reflected in the FY 1984 Budget submission. The administration proposal to attain 99,744 Selected Reservists (Pay Category A) by the end of FY 1984 represents a significant break-through over the consistency of many years of strength reduction proposals. In fact, this number represents the first meaningful increase in Selected Reserve strength contained in a presidential Budget submission in recent memory. Equipment items such as C9 aircraft, TACNAVMOD kits, etc., which have previously come to the Naval Reserve only as a result of Congressional initiative are now included as funded items in the budget request.

The Navy's current policy of horizontal integration of equipment into the Naval Reserve puts this service in the forefront of service support for a Reserve Component. The introduction of front-line ships -- Knox and Perry Class frigates -- and new aircraft -- F/A18s and E2Cs -- is strong evidence of the Navy's commitment to the maintenance of a strong Reserve Component. ROA, in the strongest possible terms, urges continued Congressional support of these Navy initiatives.

However, most impressive of all has been a continuation of the attitude change by the Active Navy towards the Naval Reserve--

"One Navy" appears well on the way towards reflecting a meaningful relationship and no longer represents the hollow phraseology which many of us observed for too many years. This remarkable turn-around can be attributed to the knowledgeable and dynamic direction being provided by Secretary Lehman; the outstanding leadership and strong support of the CNO, Admiral Watkins; and the strong and consistent emphasis by the Congress concerning effective utilization of Reservists.

Nevertheless, in certain areas, we believe even more should be done to enhance the effectiveness and mobilization readiness of the Naval Reserve.

PERSONNEL

The administration proposal to attain 99,744 Selected Reservists (Category A) by the end of FY 1984 certainly represents a significant break-through over the consistency of many years of strength reduction proposals. In fact, this number represents the first meaningful increase in Selected Reserve strength contained in a presidential Budget submission in recent memory. Previous growth and avoidance of reductions have generally been a result of Congressional initiatives. The current Navy plan calls for a Category "A" Selected Reserve strength of 119,923 by the end of FY 1987, an increase of over 20,000 from the plan submitted last year! A truly remarkable and amazing turnaround from just a very few years ago.

Nevertheless, ROA is concerned that the proposed growth for FY 1984 is insufficient. Currently, NAMMOS indicates a requirement for approximately 124,000 Selected Reservists by the end of FY 1987. The current strength is in the vicinity of 93,000; accordingly, a growth of about 31,000 will be required to comply with OSD guidance directing all services plan to meet mobilization manpower requirements by the end of FY 1987. Informal discussion indicates that Naval Reserve managers believe that a Selected Naval Reserve strength of 110,000 could be attained by the end of FY 1984 without any sacrifice in quality. Certainly, the current economic situation has a favorable impact on military recruiting -- both active and Reserve. On 6 April, the Secretary of the Navy directed reprogramming of $2.6 million to support immediate growth of Naval Reserve paid drill strength to 97,000 by 1 July 1983. Additionally, if recruiting conditions remain favorable and money is available in July, additional reprogramming of funds to support growth to 100,000 by 30 September 1983 will be considered. Accordingly, ROA recommends that Congress fund the Selected Naval Reserve to take advantage of today's economic conditions and increase to an end strength of 110,000, (MYA-105,000), exclusive of IMAs and TARs, by the end of FY 1984. ROA estimatess that these additional numbers would cost approximately $21 million over the administration budget.

ROA concurs fully that quality should never be compromised for quantity. In no instance should personnel whose skills are not required for mobilization be brought into the Naval Reserve merely to reflect increased strength. Nevertheless, ROA believes that the Navy should move boldly towards planning to meet the stated NAMMOS requirements. To this end, however, merely authorizing and funding increased numbers may be insufficient. Many of the requirements are in medical related fields which are extremely difficult to fill. For example, Naval Reserve medical requirements are expected to grow from 6,000 at present to over 17,000 by FY 1987. Expansion of the training base and development of incentives to attract needed, but scarce skills should be thoroughly explored.

Mr. Chairman, you may be aware that the Naval Reserve has approximately 5000 personnel drilling in a non-pay status, (4279 officers and 723 enlisted as of 31 December 1982). These personnel are meeting 90 percent drill requirements and most are in non-pay units which are working alongside similar Selected Reserve Units, performing the same mission. The people are pretty much ignored in the FY 1984 Budget request and, for that matter, have been similarly ignored for years. In the early seventies, 2,900 of these personnel were authorized training duty annually. However, in the last few years that number has been greatly reduced. The FY 1984 Budget request provides training duty for approximately 1200 persons in this category. In view of the fact that thousands of non-drilling IRR personnel from other Reserve components are authorized annual training duty with pay, ROA considers it unconscionable that over 3,000 Naval Reservists possessing valid mobilization assignments cannot perform training duty with pay even though they are attending at least 90 percent of all scheduled drills without pay. Accordingly, ROA strongly recommends that a total of $8 million be funded for Training Category "D" so that these Naval Reservists may perform annual training duty with pay.

## Organic Tactical Airlift

The need to maintain an organic Navy tactical airlift capability has been addressed repeatedly over the past few years. This need is codified in 10 U.S.C. 5012 (b) and has been verified repeatedly through Congressional hearings and through Navy and OSD studies. The last of the old C118 aircraft will be phased out by the end of FY 1985. Given the history over the last few years of on-again, off-again procurement of replacement C9 aircraft, satisfactory maintenance of this required capability will not occur unless the situation is closely monitored.

Maintenance of this capability is such a critical immediate need that the Navy initiated action in FY 1982 to lease used C-9 aircraft out of existing funding. This action was most commendatory but the situation requiring such "band-aid" measures should never have been allowed to occur. Congressional action would provide funding one year and take it away the next. As a result no steady pattern of procurement of C9 aircraft could possibly evolve. Last year Congress provided $16.2 million for DC9 procurement. Depending on the results of ongoing contractual actions, this amount will result in the procurement of between two and four used DC9 aircraft.

The Navy has requested $21.3 million in the FY 1984 budget which will support the lease of between eight and ten used DC9s. While the Navy is to be commended for finally including funding to obtain a reasonable number of these aircraft, ROA believes leasing instead of purchase is simply not cost effective in the long term. Under today's leasing costs, it appears that the entire purchase price will have been paid out in 2½ to three years. Accordingly, ROA recommends that the Congress authorize and fund the purchase of ten used DC9 aircraft for FY 1984 at a total cost of approximately $78 million.

There is an additional problem occuring in this fiscal year that the Congress should take cognizance of. The Naval Reserve currently is leasing four DC9s, and the lease expires 19 August 1983. (For some reason, Congressional language funding this lease in FY 1982 specifically authorized lease only -- not lease/purchase). The renewal of this lease was neither programmed nor budgeted for FY 1983. A simple 12 month renewal of this lease will cost $12.5 million. ROA recommends that, as a minimum, some sort of supplemental funding action be taken to provide this amount for the lease renewal. Additionally, we strongly recommend that the Congress seriously look into providing authority and funding to purchase these four aircraft in FY 1983 rather than a simple re-leasing.

## TACNAVMOD

The program to modernize the ASW capability of Naval Reserve land based patrol aircraft is another initiative whose momentum over the past few years has been primarily provided by Congress, although generally in the same erratic manner as C9 procurement. This program involving installation of a Tactical Navigation Modernization kit (TACNAVMOD) in P3-A/B aircraft, received no funds in FY 1980, but, Congressional action did provide for installation of TACNAVMOD in 34 aircraft in FY 1981. For various reasons, FY 1982 saw no funds appropriated for this program -- although at one time it appeared that Congress would support the modification of 36 additional P3-A/B aircraft. The subject was not specifically addressed by the Congress in FY 1983; however, the Naval Reserve did receive an additional $15 million to obtain unspecified Reserve equipment. The Navy intends to obtain 12 TACNAVMOD kits with this funding. For the first time, the FY 1984 budget submission contains a request to fund procurement of a significant number of these kits -- nineteen to be specific.

Purchase of 12 TACNAVMOD kits in FY 1983 and 19 in FY 1984 will still leave a total of 40 P3-A/B aircraft remaining outside the modernization program. Originally, ROA did not believe it necessary to modify all of these aircraft since the on-going active Navy P3C procurement program would result in a steady flow of modified P3Bs to the Naval Reserve and up to 29 P3-A/Bs could be phased out without modification. However, the current Navy proposal to effect a fifty-seven percent slow-down in P3C procurement over the next several years drastically alters this conclusion. Accordingly, ROA strongly recommends authorization and funding for an additional 17 TACNAVMOD kits in FY 1984 at an additional cost of $21 million and further recommends that the remaining 23 be authorized in FY 1985.

## P3C Aircraft

ROA enthusiastically supported the initiative of the Senate in FY 1982 which recommended procurement authorization of two new P3C ASW Patrol Aircraft for the Naval Reserve. Unfortuntely this initiative was never fulfilled. At the time we applauded the step as a necessary one towards the absolutely essential goal of horizontal equipment integration in the Active and Reserve Components. However, the aforementioned active force P3C procurement slow-down puts the matter in a such more urgent light.

The P3C is the primary ASW weapons system in the inventory. We must maintain a higher rate of procurement than is now requested if we are to meet the Soviet submarine force threat for the forseeable future. Procurement of new P3C aircraft for the Naval Reserve in each of the fiscal years 1984, 1985 and 1986 will: (1) maintain the desired level of cost-effective Reserve contribution to the Maritime Patrol Force; (2) commence Reserve equipment modernization which is essential for long-term mission effectiveness; and (3) provide necessary training for Reserve flight crew and maintenance personnel who mobilize to active P3C squadrons. Therefore, ROA strongly recommends that procurement of three new P3C aircraft (a detachment) be funded for the Naval Reserve in FY 1984. With negotiation of a multi-year procurement contract, ROA estimates each aircraft would cost approximately $31 million.

## Carrier Air Wing Modernization

The need to upgrade and modernize Reserve equipment encompasses the entire spectrum of Reserve Missions. However, it is particularly critical in the Naval Reserve Carrier Air Wings. The capability of the Reserve Air Wings is unquestioned and has been constantly demonstrated. However, they are flying rapidly aging aircraft and the compatability gap between these aircraft and those flown in the fleet grows wider at an alarming rate. This is particularly significant because the aircraft carriers to which these Air Wings would mobilize are becoming increasingly more specialized in their intermediate maintenance systems. Accordingly, there would be neither spare parts nor test-bench equipment on board to support the newly arrived Reserve aircraft. Greater compatability between Reserve and Fleet aircraft must be achieved, or the mission, for all practical purposes, becomes useless.

This fact has now been recognized by both the Secretary of the Navy and the CNO. As noted earlier, they have publicly renounced the doctrine of vertical integration and announced commencement this year of horizontal integration. The Navy intends to modernize the Reserve Tactical Air Squadrons as early as possible with the introduction of F/A-18, E2C, and A6E aircraft. ROA applauds this initiative and strongly urges the Congress to support the Navy in this long overdue and most essential effort. For several years, new production aircraft have been received in the Air National Guard and the Air Force Reserve. The Naval Air Reserve can afford no less.

However, ROA keeps hearing disturbing rumors that some congressional staff personnel do not support introduction of F/A-18 aircraft into the Naval Reserve. This lack of support does not appear to flow from the well publicized concerns about the F/A-18 as an aircraft but, amazingly enough, appears to be a "throw-back" to the old philosophy of, "It's too good an aircraft for the Reserve." We thought that canard had been long laid to rest, particularly on Capitol Hill -- but apparently not. We've heard comments such as, "F/A-18s will go to the Naval Reserve over my dead body," and "If the Navy can waste funds putting F/A-18s into the Naval Reserve, they obviously have excess funds in the budget." Mr. Chairman, and other members of this committee, we ask your unqualified support for the Navy's program of horizontal integration of equipment into the Naval Reserve. The Congress has long condemned the Active Forces for their lack of equipment support of their Reserve components. Now that the Navy has moved to the forefront in this area, don't under-cut these essential initiatives.

While F/A-18 aircraft are in fact programmed for the Naval Reserve, A6E aircraft have not yet been so programmed. Accordingly, ROA applauds and supportsthe initiative of the Naval Reserve Association that Congress approve the immediate commencment of the horizontal integration plan by authorizing the procurement of eight A6E medium attack aircraft for the Naval Reserve in FY 1984, with eight more in each of the fiscal years 1985 and 1986.

## MINE WARFARE/MINE COUNTERMEASURES

Today, the Warsaw Pact nations pose the greatest mine threat to the free world. The Soviets have emphasized mine warfare technology for generations and now possess the largest stockpile of mines in history and the largest force to deliver them.

Because of America's role in the reinforcement and resupply of Europe in wartime, we can expect that mines will be placed in our waters. The history of German mining in American waters during WWII certainly reinforces this expectation. In such a situation, our strategic and tactical forces, as well as our reinforcement and resupply ships, must have immediate breakout capability from our ports and safe transit through choke points. To accomplish this, we obviously must have sufficient numbers of capable and ready mine countermeasures (MCM) assets.

Our total MCM inventory today consists of 21 MSOs (1950 vintage) and 23 RH-53-D helicopters (1970 vintage). Prior to the Iranian hostage rescue attempt in 1979, we had 20 RH-53D helicopters; however, we lost seven in that operation which have never been replaced. As a frame of reference, we had several hundred MCM ships in commission during WWII, with more than 100 minesweepers dedicated for the duration just to insure that our East Coast and Gulf ports were kept open. Obviously, the numbers today are totally inadequate. The situation is further exacerbated by the fact that our 21 old and obsolete MSOs do not have the countermeasures equipment to cope with the current mine threat.

As a start towards closing this obvious gap, the contract for our first new mine countermeasures ship since the 1950's, was signed on 29 June 1982, and Navy is now negotiating the first followship award, authorized and funded in FY 1983. Current plans are to build 14 of these "high-mix" mine countermeasures ships. Being high-mix ships, they are not only extremely capable, but expensive as well. Accordingly, the U.S. Navy is planning to augment this MCM force with 17 less expensive mine countermeasures ships which will be used primarily as minehunters (MSHs); however, the design of these "low-mix" MSHs has not yet been determined.

Therefore, the current plan is that the three active fleet and 18 Naval Reserve Force MSO's will be phased gradually out of commission during the next 8 years as the 14 new MCM AND 17 new MSH ships join the fleet. Since the CNO has stated that Mine Warfare is basically a wartime mission belonging primarily to the Naval Reserve, (90 percent of the surface MCM mission is currently in the Naval Reserve) the Navy intends to assign these new ships to the NRF after a period of initial shakedown, probably 9-12 months each. The advent of these MCM and MSH ships will increase the number of Naval Reserve Force mine warfare ships from 18 now to a total of 31 as the building program completes in the early 1990's.

All the above planning sounds quite reassuring -- certainly in no way the entire solution to a major problem, but at least an essential first step in the right direction. However, we keep hearing rumors from the House and Senate Armed Services and Appropriations Committee sources that the MCM shipbuilding program is in trouble. Indeed, only one of the four MCM ships requested in the FY 1983 budget was approved by Congress, -- and that one as a result of a last minute compromise. The stated reason was concern that the combat sub-systems aboard the MCM-1 class needed time to "catch-up" before follow-on ships were approved. However, all major combat sub-systems are designed, ready for production and will be approved for service use by December 1983 -- so the stated reason appears specious at best. One possible issue raised against the MCM program has been that Defense items will be cut by this Congress. Since no one strongly speaks for the MCM program, it is a candidate for easy reduction or elimination. Mr. Chairman, ROA speaks strongly for this MCM shipbuilding program. As the CNO has said for the past two years, the Mine Warfare Program has been badly neglected for the past ten to twenty years. Certainly, today's MCM numbers bear out the truth of that statement -- to ignore the program any longer, in the face of acknowledged Soviet offensive mine capability, is tantamount to surrender in the areas of port security and strategic mobility. ROA strongly supports the Administration's plan to build two new attack nuclear carriers; nevertheless, even without these two carriers, the U.S. still possesses a tremendous "big deck" carrier capability. Mr. Chariman, failure to build these proposes MCM ships will essentially leave the U.S. without any surface mine countermeasure capability! Mine Warfare is not a glamour issue -- it is, however, an extremely vital concern for the U.S.

Mr. Chairman, ROA strongly urges that Congress approve funding for procurement of four follow-on MCM-1 class ships in FY 1984 ($381 million) and further that the lead ship of the MSH-1 class ($65 million) be approved for procurement in FY 1984.

## ARAPAHO

During the Falkland Islands war, the Royal Navy used 45 mercant ships taken from the trade to support the operations. Most of these ships were rapidly fitted with at-sea refueling capability and maritime communications satelite terminals. Nineteen were fitted to operate helicopters. Some were also fitted with 20mm anti-aircraft guns. Admiral Small, the VCNO, testifying recently before the HASC, stated that the U.S. had come up with plans to "take-up" merchant ships from the trade and from the Ready Reserve Force in the event of war, but that more effort was needed to develop self-defense, aviation and other naval systems for merchant ships so employed. In this context, Admiral Small stated, "ARAPAHO has proved to be a feasible operation."

Briefly, ARAPAHO is a convoy protection program which places ASW helicopters on board merchant ships. Specially built and outfitted containers, which can be loaded or unloaded by standard equipment, are positioned aboard merchant ships to form a hanger, flight deck, work and operating control spaces and even living accomodations for detachment personnel. In addition to ASW, the concept is adaptable to other missions, such as mine countermeasures, close air support, etc. In view of Admiral Small's statement, and in view of the obvious benefits of ARAPAHO, ROA strongly urges Congress to approve funding for final testing and evaluation. Since the CNO stated in 1981 that $12 million would be needed over a three year period to complete the project, $6 million would seem a reasonable figure for FY 1984 funding with the remainder necessary being funded in FY 1985. Upon successful test and evaluation, production should be started concomitant with building an ARAPAHO Reserve program.

Finally, as an addendum, I have attached a listing of equipment needs for the Naval Reserve that are not reflected in the FY 1984 Budget request nor currently in the DOD Five Year Defense Plan. This listing includes equipment needed for both the Air and Surface Naval Reserve.

## NAVAL RESERVE EQUIPMENT SHORTFALLS

The following list represents major equipment requirements of the Naval Reserve that are neither in the President's Budget request for FY 1984 nor programmed in the Department of Defense Five Year Defense Plan.

### MAJOR AIRCRAFT DEFICENCIES

| NUMBER/TYPE AIRCRAFT | REMARKS |
|---|---|
| 24 F-14A | Needed to replace 2 sqds of F-4N; Gives Reserves compatible fighter capability into 1990's. |
| 36 A-7E | Replacements for 3 Sqds of A-7B's, presently experiencing serious power plant difficulties. Entire A7B community will be grounded by November 1983 unless repairs can be immediately initiated. Real solution is earlier transition of A7E aircraft. |
| 10 A-6E | Stand-up first Reserve medium all-weather attack capability. |
| 4 KA-6D | Replace 1 Sqd of KA-3B's to support Reserve Air Wing tanking requirements. |
| 24 H-60 | Consolidate Reserve HC/HAL missions, thereby replacing HH-3 and HH-1K aircraft. Would give Reserves a viable combat SAR/light attack (helo) capability into the 1990's. |
| 10 DC9-30 | Replace retiring C-118's. FY-84 budget request contains funding for lease of 8 DC-9's - purchase is much more desirable. |

**NOTE:** Incorporation of front-line aircraft into the Naval Reserve is the stated objective of SECNAV's Horizontal Integration initiative. This program will result in a more operationally capable, supportable force well into the 1990's.

### MAJOR EQUIPMENT DEFICIENCIES FOR SURFACE RESERVE

Landing Craft (for Beach Group 1, 2, 3 and Cargo Handling Battalions)

| | |
|---|---|
| LCVP | 6 |
| LCU | 21 |
| LCM8 | 29 |
| LCM6 | 10 |

Civil Engineering Support Equipment (Beach Group 1, 2, 3; Construction Battalions/Regiments/Support Units; Mobile Inshore Underwater Warfare; and Cargo Handling Battalions.)

| | |
|---|---|
| Trucks | 1094 |
| Trailers | 267 |
| Earth Moving Equipment | 751 |
| Weight Handling Equipment | 109 |
| Drilling and Blasting Equipment | 113 |
| Flood lights and Generator Sets | 148 |
| Crush and Mix Equipment | 392 |
| Fire Fighting Equipment | 15 |
| Material Handling Equipment (MHE) (Construction Forces, Cargo Handling Battalions, Beach Groups, etc.) | 1102 |

Surveillance/Diving/Underwater Equipment (Mine Inshore Underwater Warfare, Mobile Diving, Salvage Units, Spec Warfare UDT/Seal, EOD)

| | |
|---|---|
| TSQ-108 Mine Inshore Underwater Vans (Sonar, Comms, Radar Surveillance Suites) | 12 |
| AQA-7 Sonar Indicator Sets | 28 |
| Area Point Search Systems | 20 |
| Scuba Equip Sets | 390 |
| Inflatable Boats/Motor | 17 |

Chemical, Biological, Radiation Equipment (EOD, Spec Warfare UDT/SEAL, Mobile Diving Salvage Units, Cargo Handling Battalions, Construction Forces, etc.)

| | |
|---|---|
| Radiac Sets | 575 |

## MARINE CORPS RESERVE

### Personnel

As has been the case for the last two years, the Marine Corps Reserve manpower requirements appear to be well provided for in the FY 1984 budget request. As General Olmstead testified earlier before this committee, most problem areas have been addressed and corrective action provided for in the budget request.

ROA compliments the Marine Corps on their continuing recognition of the Reserve contribution and on their consistent support of the Reserve component. The Marine Corps Reserve Budget has reflected real growth every year since FY 1978, including an average real growth of 1.6 percent contained in the FY 1984 submission. Such consistent support unfortunately has not been evident in many of our other Reserve Components throughout the past several years. This support has enabled the Marine Corps Reserve to meet and usually exceed the OSC Program Guidance. Accordingly, ROA strongly urges approval of the requested Reserve Personnel funding which will support an increased FY 1984 Marine Corps Reserve Selected Reserve end strength of 43,365 (average strength 40,300).

Certain grade and skill shortages continue to be of concern in the Marine Corps Reserve. Continued shortfalls prior service recruiting are a major contributor to the problem. Initiatives have been undertaken by the Marine Corps which should ameliorate support the RDJTF Near Term Prepositioning Ships program. Unfortunately, the proposed administration FY 1984 budget insufficiently addresses the magnitude of this problem. The FY 1982 shortfall of $684.2 million has been reduced to a current shortfall of $645 million, with some additional reductions occurring throughout the remainder of FY 1983 -- primarily as a result of the $15 million for USMCR equipment procurement provided by the Congress as an add-on to the FY 1983 budget. The out year plan projects that the major portion of these combat reportable shortfalls will be eliminated by the end of FY 1988. That estimate is probably optimistic, however, since experience indicates that matters of perceived higher priority continually arise and funds planned to reduce stock shortage shortfalls is diverted elsewhere.

Immediate efforts should be taken to significantly reduce these shortages. Otherwise, while our Marine Corps Reservists are well trained and ready for mobilization, sustainability over any prolonged period is out of the question. Accordingly, ROA strongly recommends that Congress take action during FY 1984 to rapidly accelerate the elimination of these shortages with a goal of total elimination by the end of FY 1986.

ROA strongly supports Marine Corps efforts to modernize the Reserve Ground Combat Forces. Current planning calls for the introduction over the next five years of the Mark 19 heavy machine gun; the squad automatic weapon (SAW); the lightweight 60 mm mortar; the shoulder launched multi-purpose assault weapon (SMAW); the M16A2 service rifle; and the high mobility multi-wheeled vehicle (HMMWV). We urge Congress to support these efforts and expedite this modernization process to the maximum extent feasible.

Much of what I stated earlier about the Naval Air Reserve applies equally to the Marine Air Reserve. The 4th Marine Air Wing is severely limited in its capability to augment and reinforce the active forces due to aging aircraft, aircraft shortages, incompatibility between active and Reserve aircraft and block obsolescence. Many Marine Air Reserve squadrons deploy to aircraft carriers upon mobilization. The Marine Reserve aircraft would suffer the same lack of equipment support as would the Naval Reserve aircraft for the same reasons. Here again, we must start moving toward new procurement of identical equipment for both the Reserve and Active Duty Marine Corps. Unfortunately, however, the Marine Corps has not initiated the horizontal integration of equipment policy as has the Navy. Since the same rationale applies and since the Marine Corps is a part of the Navy Department, ROA does not understand the reason behind this apparent Marine Corps reluctance. Accordingly, we urge Congress to direct the Marine Corps to implement a similar horizontal integration equipment policy to that already underway in the Navy.

As in the Navy, introduction of F/A-18 aircraft into the

Marine Air Reserve should commence as soon as possible to replace aging and incompatible F-4s. The AV-8B Harrier should be procured for both active and Reserve Squadrons, replacing obsolete A-4E/Fs currently in the Reserve.

Congress has previously directed establishment of two Marine Air Reserve KC-130 aerial refueler/transport squadrons and further directed expedited procurement for this purpose. Six KC-130 aircraft were funded for the Marine Air Wing as add-ons by FY 1982 and FY 1983 Appropriations actions. None are requested in the FY 1984 budget,therefore still leaving a total of fifteen KC-130s to be procured to meet the Congressional mandate. ROA recommends funding to procure four additional KC-130 aircraft for the Marine Air Reserve in FY 1983.

While there is a Marine Corps-wide critical shortage in AH-1 attack helicopters, the Reserve squadron only possesses eight of the 24 aircraft authorized. This numerical shortfall is the same as that noted last year. Absolutely no progress towards alleviating this shortage has been made. Current planning will bring the Reserve squadron to its authorized strength, but with aging AH-1J aircraft identical to the eight old AH-1Js currently on board. The urgent need is to increase the helicopter anti-armor capability to counter large numbers of mechanized and armored units which will be encountered on a high threat battlefield. Only the AH-1T (TOW) has an anti-tank capability. This is an ideal mission for the Reserve as the many of these problems. Accordingly, ROA strongly urges approval of the increased exercise funding requested for the Marine Corps Reserve in FY 1984. We concur with General Olmstead that such funding will support more realistic and challenging Unit training and, as a result, attract and retain many of the skilled personnel currently missing.

As in the other Reserve components, however, Congress must provide additional incentives for Reserve recruiting and retention if such problems are to be truly solved. As a matter of information, the Marine Corps Reserve recorded a dramatic increase (almost 250 percent) in First Quarter FY 1982 reenlistments resulting from a Congressionally directed increase in the education bonus from $2000 to $4000. Concomitantly, enlistment and reenlistment bonuses have been insignificant incentive factors -- due primarily to insufficient amounts and requirements to pro-rate over the enlistment period.

## EQUIPMENT

The material readiness of the Marine Corps Reserve 4th Division/Wing Team is a matter of major concern. They simply don't have the necessary equipment, repair parts, consumables, etc. which they must have on mobilization. These kinds of items are always subject to quick deletion or reduction during the budget process because such action results in immediate cost savings. An already unsatisfactory situation was worsened even more by a ten to twelve percent reduction of these stocks to manpower, airfield, and support facilities are available and the AH-1T requires 50 percent less maintenance than the aging AH-1J planned for the Reserve. Accordingly, ROA recommends that procurement of AH-1T helicopters begin immediately for the Marine Air Reserve and that the entire twenty-four aircraft Reserve Squadron be equipped with this helicopter as soon as feasible.

The Marine Corps has developed long range plans to upgrade the capabilities of the Marine Air Wing. The intent of these plans obviously is laudable. However, as noted earlier, they are far in the future and depend on too many variables. ROA strongly urges the Congress to immediately commence authorization and funding for this long overdue moderization program as the most critical need for the Marine Corps Reserve.

## AIR FORCE RESERVE

The Air Force Reserve (AFR) has achieved new levels of strength and readiness during the past year. In FY 1982 it attained an end strength of 64,443 versus a programmed 63,736. Quality again increased with 96 percent of all non-prior service enlistments high school graduates. The efficiency of the Reserve recruiting program as well as the dedication of all Reserve members is reflected in this accomplishment.

In FY 1984 an end strength of 69,880 is requested, a 5.0 percent increase over FY 1983. This reflects the military personnel requirements for aircraft modernization and additional units. It is gratifying to note that the Air Reserve forces (AFR plus Air National Guard) provide nearly 25 percent of all Air Force flying and support mission capability with only 7.0 percent of the budgeted military personnel dollars ($910 million of $13,106 million). With the current pressures on the Defense Budget, it is obvious that the Air Reserve forces are a real bargain in the total force.

The Air Force Reserve is not only cost effective, it is a combat ready, fighting force. Exercises during the past year have again proved that all Air Force Reserve units can be mobilized in 24 hours and deployed within 72 hours. With the exception of three units converting to newer aircraft and three units being newly activated, all equipped flying units are combat ready.

The Air Force Reserve performs a full spectrum of meaningful missions. In FY 1982 the AFR airlifted 41,385 patients, supported the airlift mission in the United States Southern Command, flew at least 70 percent of the hurricane reconnaissance missions in the Gulf of Mexico, as well as regularly participating in JCS and Major Command field training exercises. We are especially proud that AFR rescue and recovery units were officially credited with saving 81 lives.

Among the key personnel in maintaining mission unit readiness are the Air Reserve Technicians (ARTs). These dual status individuals provide the day-to-day management and continuity of their units while performing in their civilian capacity. As military members of the units, they train other Reservists during active and inactive duty training periods. The high skill level and stability of these employees is critical in sustaining the Air Force Reserve's operational readiness. We are concerned that the manning of this crucial program will suffer if the Air Force civilian ceilings are lowered, since the technicians are included in these ceilings. With the unit conversions to more modern aircraft scheduled for FY 1983 and FY 1984, it is essential that adjustments be made to accommodate the requirement for increased numbers of technicians.

In the Conference Report on House Joint Resolution 631 (FY 1983 Appropriations), concern was expressed by the conferees that proposed FY 1983 conversions of military technicians to Active Guard Reserve (AGR) personnel was principally responsive to the requirement to reduce the number of civilian personnal to meet civilian personnel ceilings. The conferees further stated:

> "It seems that a streamlined approach would remove military technicians from overall ceilings to permit the determination of appropriate mix for each component on the basis of cost effectiveness and combat readiness."

The Reserve Officers Association believes that the most simple and effective way to achieve the objectives of Congress in this matter is to budget for military technicians as separate line items in the table of Full-Time Reserve Manpower. In this manner, management of this critical resource and of AGR personnel will be highlighted and not subordinated to overall civilian personnel ceiling objectives.

The Air Force continues to modernize the AFR with newer aircraft and equipment. We are pleased that this budget request includes most of the significant support equipment needed to fill the shortages in the AFR. Training, readiness, and survivability will be significantly enhanced by these items. ROA would also like to thank this committee for the emphasis it has placed upon this aspect of Reserve readiness.

While much progress has been made in providing the Air Force Reserve with more modern aircraft and equipment, many problems still remain. The modernization of the Air Force Reserves equipment must be looked at in the context of the modernization of the entire Air Force, since both Active and Reserve forces share the problems of block obsolescence and high operating costs of older aircraft. We ask, however, in looking at the force structure mix that the economies associated with Reserve Force equippage be considered.

If in the interest of economy, the Committee determines a need to shift a portion of the Total Force from the active to the Reserve forces we would recommend the following candidates for the Air Force Reserve. AFR Associate squadrons are currently flying active force C-141's and C-5's. Equipping selected AFR Associate squadrons with C-141's and/or C-5's would be operationally and economically sound since most of the required trained aircrews and maintenance personnel are already in place. In the tactical area selected Reserve C-130 squadrons could be fully equipped with 16 aircraft per squadron rather than the current eight. Similarly, Reserve fighter squadrons could be equipped with 24 aircraft per unit like their active force counterparts, rather than the current 18. All of these options represent savings in operating, personnel, and overhead costs.

We appreciate that Congress has recognized the need for modern tactical aircraft in the Air Reserve forces by adding 38 C-130H aircraft to the DOD budget through FY 1982, but only six of those aircraft have gone to the Air Force Reserve. Even these six are two short of the number required to bring the receiving unit at Dobbins AFB, Georgia up to minimum strength. We urge the Committee to include two aircraft for Dobbins over and above any other C-130H procurement for the Air Reserve forces.

Regardless of any decisions regarding the active and Reserve force structure, a systematic program for replacing the seven C-130A model units in the Air Force Reserve should be established. The average C-130A aircraft in the Reserve is just under 26 years old. Without a replacement program now, we will face a crisis in future years. We suggest that C-130H aircraft be programmed and procured for the Air Force Reserve.

In the tactical fighter mission, the Air Force Reserve is building from eight squadrons in FY 1981 to eleven squadrons in FY 1983. Five of these units will be equipped with F-4 aircraft, five with A-10's and one with F-105's. The F-105 unit is programmed to receive F-16's in FY 1984.

While the F-4's are new to the Air Force Reserve, they are old aircraft. In fact, the F-4's that replaced the F-105's at Carswell AFB average 4,620 hours of airframe time compared to 4,460 for the units' F-105's. The average age of the Air Force Reserve F-4's exceeds thirteen years. The Air Force recognized this problem and will convert the F-4 unit at Homestead AFB, Florida from F-4C aircraft to F-4D's in FY 1984. However, the cost of maintaining and operating these aircraft is considerably higher than for the F-16. For example, the fuel cost for an active force F-16 squadron is approximately $5 million per year less than for an F-4 unit. Total operations and support costs are almost 22 percent less for an F-16 equipped wing compared to an F-4.

As with the C-130A, a comprehensive program for the modernization of the Air Reserve Force fighters is necessary. General Creech has testified that, as presently programmed, TAC will lose more fighters through attrition, than it will procure. Obviously, the shortfall in first line combat aircraft will continue to increase unless additional new aircraft are procured for the Total Force, active and Reserve.

The Reserve Officers Association, in a resolution passed at our Mid-Winter Conference this February, notes that avionics and munitions modernization, along with increased readiness, is one method of offsetting the Soviet numerical superiority in aircraft over the USAF. We urge the Congress to support an adequate budget for modernization, readiness, and sustainability for the U.S. Air Force.

In summary, the Air Force Reserve's wartime mission is expanding. With your continued support in providing modern equipment, the Air Force Reserve will continue to maintain its superb readiness and combat capability.

## CONCLUSION

I'd also like again to bring to this committee's attention an item of concern which applies to all of our Reserve Components. ROA has noted for the past two years that, over unanimous service opposition, OSD had commenced incorporating full-time support personnel and Individual Mobilization Augmentees into the Selected Reserve numbers. Such action appears to be clearly in violation of 10 U.S.C. 268 and 270 which specifically define the Selected Reserve and direct participation in at least 48 scheduled drills and 14 days of ACDUTRA each year. In fact, the Navy Judge Advocate General has specifically opined that the OSD action is not in accordance with the law. Additionally, such procedure not only confuses all concerned by using existing terms for new definitions, but also artifically inflates Selected Reserve strength numbers thereby giving an erroneous impression of growth. OSD is still using this procedure and pointing to significant growth in the size of the Selected Reserve. Much of this announced growth is merely the result of changing the bookkeeping and should not be viewed as a significant growth in the "real" Selected Reserve. For example, various persons, including some members of the Congress were not aware that the Naval Reserve funded level remained constant for FY 1982 and 1983 at 94,000. The general belief was that it had increased to 105,000. Only by specifically pointing out that the additional numbers reflected nothing more than the inclusion of IMA and full time support personnel was the actual situation realized.

In the House Armed Services Committee Report on DOD Authorizations 1983 (Report No. 97-482), DOD was directed to submit a report explaining and justifying this revised accounting procedure as part of the FY 1983 budget request, but that DOD has not complied. The 1983 HASC Report again directed submission of such explanation and specifically cited items to be included by DOD. It is ROA's understanding that a DOD statement was eventually submitted but did not contain many of the items directed in the 1983 HASC Report. We further understand that DOD considers the request answered and has no intention of replying specifically to the direction contained in your FY 1983 report.

Such accounting procedures should be stopped, not only because of the apparent violation of statutory definition, but also because of the misleading impression of improved readiness resulting from such apparent strength increases.

Before I close I would like to take this opportunity to briefly mention several other important items that ROA is interested in.

Portal to Portal Coverage

ROA continues to support the need for legislation that would provide so-called "portal-to-portal" protection for drilling Reservists. As you know, should a Reservist become violently ill during a weekend drill, the Department of Defense is not authorized under current law to pay for his medical care. Should he be injured

combined with the two provisions I have just discussed they convey a loud and clear message to the entire military community, both active and retired, that our government will breach its trust, and after accepting service rendered will change the terms under which it compensates for that service. ROA believes that these proposals will have significant long-range implications, especially in the area of retention, and that the hidden costs of tampering with the military retirement system on a piecemeal basis should be thoroughly evaluated by the appropriate oversight committee of Congress before any additional changes are made in the current retirement program.

Health Care Personnel

As you are well aware, the 96th Congress enacted P.L. 96-284, which established special pay for Active Duty medical officers. This legislation is contributing significantly to the recruitment and retention of Health Care Professionals and thus helping to reduce the shortages in this professional service. Unfortunately, the special pay established in P.L. 96-284 for Active Duty medical officers did not include the health care professionals in the Reserve Components where critical shortages also exist. Similar legislation is needed for the Reserve Forces health care personnel to overcome serious shortages in all the Services and to enhance their mobilization readiness. ROA believes that a special pay incentive program similar to P.L. 96-284 for the Reserve Components would help overcome one of the greatest obstacles in the recruitment and retention of qualified health care personnel.

## Commissary Privileges

Reservists currently are entitled to commissary privileges for each day of active duty or active training duty periods of at least 72 hours. ROA favors modification of the commissary privilege so that drilling Reservists will be able to spread out their entitlement over the year (in the same manner that post exchange privileges are currently extended).

ROA also believes that retired Reservists who have completed 20 or more years of qualifying service, but who have not attained age 60, should be authorized commissary and exchange benefits while they wait to attain eligibility for retired pay. This would be a minimal-cost benefit and would properly reward these individuals for their devoted service to their country, rather than leave them in the "limbo" status they currently are in prior to attaining age 60. It is our opinion that these changes would be very attractive low cost retention measures.

## Retirement

ROA is greatly concerned over the Administration's proposals to once again change the method by which military retired pay is adjusted to reflect the increase in the cost of living. You are well familiar with the background: the elimination of the 1 percent kicker which had been added to compensate for lost purchasing power; the reduction from two adjustments a year to only one with the individual retiree absorbing the loss that had occurred during the previous calendar year; the three year COLA reduction for retirees under age 62; and now the Administration proposes eliminating the COLA entirely next year for military and civil service retirees with no provision being made for a later catch up of lost purchasing power.

In addition to this proposal the Administration also wants to make permanent the 50 percent COLA cap for retirees under age 62, thus guaranteeing that the relative purchasing power of military retired pay will decline in the future. It has been estimated that the purchasing power of a typical Lt. Colonel retiring today would be reduced 40 percent by the time he reaches age 62. It should be noted that by law virtually no member of the military service, either Regular or Reserve, can stay until age 62.

Two other Administration proposals relating to retired pay, elimination of the lookback provision and the rounding-down to the lower dollar are probably justifiable in todays economic environment; however, I must point out that when on his way to or from drill, again, he is not authorized military medical care. The inequity is readily apparent when you consider that an individual on Active Duty would be covered in the circumstances just described. We urge Congress to rectify the current situation and provide these Reservists the proper coverage that they deserve for carrying out their military obligations. Language to accomplish this is contained in S.989, a bill recently introduced by Senator Jepsen.

## G.I. Bill

ROA also supports "G.I. Bill" legislation which would improve quality and retention in both the Active and Reserve forces. We are particularly interested in legislation that includes educational benefits for Reserve service, such as those contained in Senator Armstrong's S. 691. We believe it is important to look beyond today's excellent recruiting statistics. When the economy starts to improve, we'll have a recruiting problem. The benefits of a G.I. Bill could help our Armed Forces -- Active and Reserve -- recruit and retain qualified personnel. We should not wait until the roof leaks again in order to fix it.

Thank you for the opportunity to appear before you. Your support for the men and women in uniform, Active and Reserve, is noteworthy and sincerely appreciated. I will be happy to answer any questions that you might have on these issues.

### F-4 RADAR

Senator STEVENS. Senator Rudman made an inspection out in North Dakota over the weekend and he came back with the information that the F-4's did not have the modern radar so that the Reserve units could not transition from F-4's to F-16.

Has your organization looked into that at all?

Captain MOODY. We understand that there is a plan if they get the F-4's that they are going to have to spend approximately $1 million per plane. I believe that is the figure.

Senator STEVENS. $150,000 he said.

Captain MOODY. There is a certain amount that they have to spend per plane to upgrade the radars and the other avionics gear in the F-4's, that is true, because right now the F-4's that they would be getting are not really capable to do the job.

Senator STEVENS. They have the F-4's coming and we do not have enough F-16's unless we order some new ones?

Captain MOODY. Unless we order some more, that's right.

Senator STEVENS. I would suggest maybe you might want to visit with him because he is prepared to make some substantial recommendations to the committee about what to do about the Air Reserve.

Captain MOODY. I appreciate your recommendation and we will certainly do that, sir.

Senator STEVENS. Thank you, very much.

Captain MOODY. Thank you, sir.

Senator STEVENS. We appreciate your testimony.

## U.S. COUNCIL FOR AN OPEN WORLD ECONOMY

## STATEMENT OF DAVID J. STEINBERG, U.S. COUNCIL FOR AN OPEN WORLD ECONOMY

### BUY AMERICAN

Senator **STEVENS**. David Steinberg, U.S. Council for an Open World Economy. Good morning, Mr. Steinberg.

Mr. **STEINBERG**. Good morning, Mr. Chairman. I am David J. Steinberg, president of the U.S. Council for an Open World Economy. The council is a private, nonprofit organization engaged in research and public education on the merits and the problems of achieving in an open international economic system in the overall national interest. It does not act on behalf of any private interest.

Senator **STEVENS**. Did you testify last year, too?

Mr. **STEINBERG**. I did, sir. I want to point out, sir, that, as in the past, my testimony is limited to the Buy American requirements of defense procurement.

I do understand, Mr. Chairman, that other committees in Congress have jurisdiction over this question. But I believe that your committee also has an interest in this issue and I shall speak for only a few moments to highlight some of the points made in the statement that I have presented to your committee.

Senator **STEVENS**. We will print your statement in full in the record.

Mr. **STEINBERG**. I appreciate that, Mr. Chairman.

I am not absolutely opposed to Buy American requirements. What I am opposed to is the present pattern of Buy American requirements.

This present pattern, in my view, constitutes a hodgepodge of subsidies which the Congress and the executive branch ought at long last to reassess and reform to make sure that whatever Buy American policy we have affecting defense procurement is a coherent policy that is systematically reviewed as to justification and effectiveness.

### PATTERN OF BUY AMERICAN STRICTURES

Now, the present pattern of Buy American strictures is not related in any way to a coherent policy addressing their real problems of those particular industries that are beneficiaries of this Buy American policy.

For example, the textile Buy American requirement which has been on the statute books for almost 30 years is not related to any coherent comprehensive policy that addresses the real problems and the real needs of the textile industry.

I say the same thing with respect to the specialty metals Buy American requirement. There is no coherent specialty metals strategy that addresses the real problems of this important sector of the U.S. defense mobilization base.

And so it is our view that if there are to be Buy American requirements with respect to particular industries, they ought to be related to coherent policies that address the real problems of these industries.

Moreover, Mr. Chairman, there are general Buy American requirements affecting defense procurement and also requirements dealing with specific industries.

I think the question should be asked: Why do we need Buy American strictures affecting textiles, specialty metals, and other specific products when we have a comprehensive Buy American requirement with respect to defense procurement?

What I am advocating, as I have in the past, Mr. Chairman, is not that the Congress this year terminate Buy American requirements. I would oppose that. There is a right way and a wrong way to impose Buy American requirements. There is a right way and a wrong way to remove them.

All I am suggesting is that this year in preparation for next year, in preparation for the defense budget of fiscal 1985, the Congress this year ask the Secretary of Defense and the President to report to the Congress next year on the whole subject of Buy American requirements.

How do these Buy American requirements relate to other things the Government is doing to assist those industries that are the beneficiaries of these strictures? What do these Buy American requirements cost the Nation in financial and other terms? How essential are these requirements? Are they more, or less, than what is needed?

Then perhaps we can get a clear picture of where we are going on this issue, the cost effectiveness of, these requirements and how much longer we can expect to have these requirements with respect to defense procurement.

Thank you, Mr. Chairman.

[The prepared statement of David J. Steinberg follows:]

# U.S. Council for an Open World Economy

## PREPARED STATEMENT OF DAVID J. STEINBERG

PRESIDENT

(The U.S. Council for an Open World Economy is a private, non-profit organization engaged in research and public education on the merits and problems of developing an open international economic system in the overall national interest. The Council does not act on behalf of any private interest.)

Congress and the Executive Branch for too long have neglected the need to reform the disjointed array of Buy American requirements affecting defense procurement. Combatting inflation, making the most effective use of scarce financial resources, and finding real solutions to the real problems of ailing industries should highlight the aims of this policy overhaul.

These procurement strictures consist of (1) the Buy American Act (affecting government procurement across the board), supplemented by a 1962 executive order giving a 50 percent advantage, for balance-of-payments purposes, to domestic suppliers in defense procurement, and (2) an assortment of more-restrictive rules, established by Congressional initiative, mandating procurement of certain products from domestic industries alone (except for extraordinary circumstances). The best known of the specific-industry mandates involve textiles (since 1956) and products containing specialty metals (since 1972), including stainless steel (and stainless steel flatware per se).

Some products have been exempted from the general Buy American stricture by a multilateral trade agreement negotiated in the late 1970's, others by Congressional waivers in the interest of NATO standardization and interoperability. In addition, the Department of Defense obtained Congressional authority to purchase certain textile products from foreign sources in the interest of these NATO objectives. Waivers for NATO purposes (and generally to help "offset" foreign purchases of military equipment from the United States) were also obtained in 1977 for certain products containing specialty metals, but these waivers were terminated in the defense appropriations act of 1981 under pressure from labor and management in the specialty-steel industry. The defense authorization bill for fiscal 1983, as passed by the Senate, restored these waivers, but this provision failed in the House and a less-than-adequate substitute was adopted by Congress. I urge Congress to restore these waivers. But more than this is needed -- in the interest of a strong, durable specialty-metals industry, and of sensible utilization of Buy American regulations in defense procurement.

The "sacred cow" subsidies in the considerable number of products covered by Buy American strictures in defense procurement should be carefully reassessed and reformed. The government, at long last, must find more-enlightened ways to address the problems of industries it feels require and deserve government assistance. The Buy American rules are examples of the shortsighted shortcomings of Congressional and overall government performance in this respect. Last year's effort to restore the specialty-metals waivers revealed worthy concern with the need for a more cohesive, cooperative military alliance between the United States and friendly nations. But there has been no evidence anywhere in government of reassessing and reforming government assistance to industries, including defense-related industries, that need and merit assistance at public expense.

## Lack of Coherent Industrial Policy

Buy American strictures in defense procurement are a policy hodgepodge. They are not components of coherent, well-designed policies of government aid to ailing industries. There is no periodic reassessment of these strictures in the interest of sound policy formation and the most efficient use of financial resources in this major sector of the government's budget. Nor is any Buy American requirement concerning the products of specified U.S. industries linked in any way to anything identifiable as coherent attention to the real problems and needs of the respective industries. For example, there is no coherent textile policy of this description, of which the Buy American requirement on textiles is a part; nor a coherent specialty-metals policy, of which the Buy American rule on specialty metals is a part. Nor does the government know what the Buy American strictures in defense procurement cost, their contribution to the strength of these industries, how long these measures may be needed, what alternative or supplementary measures may merit adoption, and why "micro", specific-product Buy American requirements are needed over and above the "macro" rules of overall Buy American standards.

Instead of coherent, cost-efficient strategies addressing the real problems of industries meriting government help, we have simplistic, costly concessions to political pressures for government protection against foreign competition -- and (with some exceptions) retention of these measures year-in and year-out, no matter the need for an all-out effort to solve industrial problems, increase industrial productivity, reduce subsidies, combat inflation and use most efficiently and productively the funds provided by American taxpayers. The cost-increasing, inflationary implications include the tendency of Buy American strictures to increase costs for U.S. manufacturers who (to the extent that these strictures do not deter them from using imported materials in the production of such items) are determined to bid on defense contracts for any of the affected products and may find it necessary to incur special inventory and other expenses where production for defense contracts must be kept separate from non-defense production.

To the extent that these industries are essential to national security, there is all the more reason to deal incisively with their real problems. Subsidizing such industries through the Buy American requirements now in effect is thus, not only bad economics and shabby politics, but badly conceived attention to the mobilization base. To the extent that these industries need government help, such assistance should take the form of redevelopment strategies designed so to strengthen these sectors of the mobilization base that these industries might become viable without barriers against foreign competition (assuming they are not in this condition now). To the extent that any of these industries cannot survive without import barriers of some kind, yet must be preserved for legitimate national-security purposes, the American people have a right to know how, and how effectively, these import restrictions are helping to cure whatever problems warrant such government aid, and at what cost to the taxpayer.

Easy recourse to import restrictions tends to divert attention from the tougher, more responsible task of carefully diagnosing the real problems and needs of industries that may need and merit government help. It is policy laziness we can no longer afford, involving costs (financial and otherwise) that get higher as years pass and as the need for policy perfection grows more urgent. The substantial increase in the defense budget, particularly at a time of massive budget deficits that must substantially be reduced, makes these reforms all the more necessary.

## Plan Now for Fiscal '85

Except for restoration of the waivers on certain products containing specialty metals, I am not asking that the defense-related Buy American strictures be terminated this year. I am not unmindful of the political realities. Moreover, to remove them abruptly, without adequate preparation within the policy framework suggested above, would not be in the national interest. I do urge that this year, in preparation for fiscal 1985 defense appropriations, Congress ask the President to reassess the defense-related Buy American requirements and report to Congress on (a) the extent to which they are needed, (b) other steps being taken or that should be taken to strengthen these industries within the framework of a coherent adjustment strategy, and (c) the cost of such an assistance program, including the Buy American requirements per se, in financial and other terms.

Here is an important opportunity for the government to launch an "industrial policy" with national-security implications -- a policy that addresses the real problems of ailing industries, phases-out subsidies that may no longer be needed, reduces the cost of national defense, promotes freer world trade, and aims at the higher productivity so essential to America's international competitiveness. The Administration should undertake these reforms whether or not Congress requests them. No movement along these lines appears to be under way in the Department of Defense. Nor has the Office of Management and Budget included the specific-industry strictures in the review it is supposed to have been conducting of Buy American rules affecting defense procurement.

Twenty-three years ago, the government imposed quotas on imports of petroleum in the supposed interest of national security. It did so without a coherent petroleum policy. The national-security clause of the trade legislation, under which these controls were imposed, did not require (and still does not require) such policy coherence, with systematic review of the policy's progress. That ill-considered, ill-fated approach to such an important issue is an important part of the story of national neglect, indeed national negligence, in the energy field. Isn't that import policy debacle enough of a lesson on the deceptions and dangers of simplistically using import controls as a remedy for alleged industrial weaknesses? When will government ever learn?

## FOREIGN SUBSIDIES TO FOREIGN CONTRACTORS

Senator **Stevens**. What are we going to do about the foreign subsidies to foreign contractors in our defense procurement area?

We have just heard testimony here about how they subsidize their repair shipyards. We have had testimony on other subsidies where foreign governments are subsidizing their contractors who come and bid on our defense procurement.

How long would we keep a mobilization base if we let that go?

Mr. **Steinberg**. I think this is a very serious matter, Mr. Chairman. It requires a complex array of responses.

We have antisubsidy statutes on the books. Perhaps they are not being enforced as adequately as they should. I don't know.

Senator **Stevens**. We can find them out pretty easily when they are in the competitive world, but when they are in the Government world, and particularly in defense, where the U.S. taxpayer is buying that foreign-built product, item, for tanks or planes or whatever it might be, how do we do that except by a response to a Buy American statute?

Mr. **Steinberg**. Well, perhaps in specific instances. As I said at the outset, I am not categorically, absolutely opposed to Buy American. I just feel that what we have now is a hodgepodge of requirements on textiles, specialty metals, food products, et cetera, in addition to the overall Buy American requirement.

Senator **Stevens**. You are right, because each time we run across a new foreign gimmick we respond with some new approach of our own.

## VALUE-ADDED TAX REFUND

I was talking to another committee about the value-added tax refund. We seldom look at that as a subsidy; but it is, is it not?

If France gives back to the producer of an aircraft wheel all of the taxes that have been paid not only by the final producer of it but all the way along the line from the manufacturer of the rubber for the tire to the little bolts to the axle and everything else, everyone gets back State, local, and Federal taxes if the item is exported; now, is not that a subsidy compared to our contractors who all pay taxes all of the way along the line?

Mr. **Steinberg**. Compared to our situation, I think that may be a subsidy.

Senator **Stevens**. Why is not Buy American the answer then?

Mr. **Steinberg**. Well, Buy American may be an answer, Mr. Chairman, in some of these instances.

Senator **Stevens**. It is not a solution, is that what you are saying?

Mr. **Steinberg**. It is not a solution. Moreover, we have no coherent policy dealing with the Buy American issue. It is just a collection of things that have accumulated over the years and we ought each year to reassess this Buy American policy. I am not saying remove all forms from our statute books.

Senator **Stevens**. I agree with you. If I am still around, God willing, the year we balance the budget we will hold some hearings on how we can straighten out that, all right?

Mr. **Steinberg**. Thank you, Mr. Chairman.

Senator **Stevens**. We have too many things on the budget problems before then.

Mr. **Steinberg**. I realize that.

Senator **Stevens**. Thank you very much.

### PREPARED STATEMENTS

Is Master Chief John B. Thomas here? If he is not here, his statement has been submitted for the record. We will print it in the record at this point together with additional statements of persons unable to attend the hearing.

[The prepared statements follow:]

**NAVAL ENLISTED RESERVE ASSOCIATION**

## PREPARED STATEMENT OF MASTER CHIEF JOHN B. THOMAS, USNR(RET)

NATIONAL LEGISLATIVE DIRECTOR

MR. CHAIRMAN, COMMITTEE MEMBERS, THE NAVAL ENLISTED RESERVE ASSOCIATION THANKS YOU FOR THE OPPORTUNITY YOU HAVE PROVIDED US TO APPEAR BEFORE YOUR SUBCOMMITTEE. WE ALSO WANT TO THANK THE COMMITTEE FOR ITS DEDICATION AND DETERMINATION TO PROVIDE A STRONG GUARD AND RESERVE FOR OUR COUNTRY.

OUR PURPOSE IN APPEARING BEFORE THIS COMMITTEE IS TO DISCUSS NAVAL RESERVE ISSUES FOR FY 1984.

WE APPRECIATE THE INITIATIVES THAT SECRETARY LEHMAN HAS TAKEN AFTER SO MANY YEARS OF NEGLECT ON THE NAVY'S PART FOR THE NAVAL RESERVE. IF THIS LEADERSHIP CONTINUES, THE NAVY COULD MOVE FROM LITTLE OR NO CONCERN TO THE LEADERSHIP ROLE IN THE RESERVE MISSION AREA.

OUR ASSOCIATION IS PLEASED WITH THE BIPARTISAN SUPPORT IN CONGRESS, TO PUT MORE EMPHASIS ON THE GUARD AND RESERVE IN THE TOTAL FORCE POSTURE. HOWEVER,MORE PLANNING MUST BE EXERCISED IN THE PENTAGON AS TO WHERE THE RESERVE CAN DO THE JOB, AND SAVE MONEY AT THE SAME TIME.

THE NAVAL ENLISTED RESERVE ASSOCIATION WILL COMMENT ON VARIOUS ISSUES WHICH ARE OF INTEREST TO THE ENLISTED RESERVISTS. THEY INCLUDE:

NAVAL SELECTED RESERVE STRENGTH
NAVAL RESERVE MISSIONS
COMPENSATION

NRF SHIPS

P-3 A/B TACTICAL NAVIGATION MODERNIZATION (TAC/MOD)

RESERVE P-3C PROCUREMENT

NAVY AIRLIFT MODERNIZATION

## NAVAL SELECTED RESERVE STRENGTH

TO AVOID CONFUSION, IT SHOULD BE NOTED THAT THE NAVAL ENLISTED RESERVE ASSOCIATION WILL USE ONLY SELECTED DRILLING RESERVE NUMBERS. DRILLING RESERVE FIGURES IN THIS TESTIMONY DO NOT INCLUDE TAR'S OR IMA CATEGORY "D" PERSONNEL.

IN FY 1982 AND 1983 BUDGET HEARINGS OUR ASSOCIATION RECOMMENDED A REALISTIC RATE OF GROWTH FOR THE SELECTED RESERVE TO ACHIEVE WARTIME REQUIREMENTS VALIDATED BY THE NAVY'S MANPOWER MOBILIZATION SYSTEM (NAMOS) OF OVER 123,000 BILLETS BY THE END OF FY 1986. THE NAVY PLAN FOR A SMALL INCREASE TO WELL BELOW THE NAMOS REQUIREMENTS WAS GUIDED BY WHAT SOME CALLED ATTAINABILITY. AS OF JANUARY 1983, SELECTED RESERVE DRILL STRENGTH WAS IN EXCESS OF 97,000, NECESSITATING A CUT BACK OF APPROXIMATELY 4%. MANY CAREER ENLISTED RESERVISTS HAVE ARBITRARILY BEEN TRANSFERRED TO THE IRR, CAUSING TURMOIL AND CONFUSION. NERA STRONGLY PROPOSES THAT A CONTINUED PHASED CLIMB TO THE REQUIREMENTS IS FEASIBLE AND ATTAINABLE, IF THE STATED NAVY WARTIME MOBILIZATION REQUIREMENTS ARE VALID.

IT IS MUCH LESS EXPENSIVE TO FUND RESERVES IN PEACETIME FOR A WARTIME MISSION THAN TO FINANCE THEM IN THE ACTIVE FORCES. FAILURE TO AUTHORIZE FOR AN INCREASE IN THE NAVAL RESERVE STRENGTH TO MEET WARTIME REQUIREMENTS BY FY 1986 APPEARS TO BE UNWISE AND CONTRARY TO THE NATIONAL DEFENSE EFFORT. THE SELECTED NAVAL RESERVE IS THE ONLY SOURCE OF TRAINED MANPOWER IMMEDIATELY AVAILABLE TO AUGMENT THE ACTIVE NAVY IN THE EVENT OF WAR, NATIONAL EMERGENCY OR FOR OTHER CONTINGENCIES WHICH WOULD REQUIRE USING PRESIDENTIAL AUTHORITY CALL UP AS MANY AS 100,000 SELECTED RESERVISTS FOR A 90 DAY PERIOD.

IN FY 84 THE NAVY PLANS FOR A SMALL INCREASE IN STRENGTH THAT CONSISTS MAINLY OF RECRUITS. NERA BELIEVES THAT MIDDLE GRADE PETTY OFFICERS ARE NEEDED NOW TO MAN THE UPDATED HARDWARE BEING INTRODUCED INTO THE NAVAL RESERVE.

THE NAVAL ENLISTED RESERVE ASSOCIATION STRONGLY RECOMMENDS THAT CONGRESS AUTHORIZE AND FUND FOR A 105,000 NAVAL RESERVE DRILLING AVERAGE STRENGTH FOR FY 1984. THIS WOULD COST AN ADDITIONAL $20.9 MILLION ABOVE THAT REQUESTED BY THE ADMINISTRATION. THIS WOULD ALSO PROVIDE A GRADUAL INCREASE IN THE NAVAL RESERVE STRENGTH TO THE NAMOS REQUIREMENTS TO BE REACHED BY END OF FY 1986.

## NAVAL RESERVE MISSIONS

THE NAVAL ENLISTED RESERVE ASSOCIATION FULLY SUPPORTS THE SECRETARY OF THE NAVY IN HIS EFFORT TO ACHIEVE MARITIME SUPERIORITY IN THE SHORTEST POSSIBLE TIME. OUR ASSOCIATION ALSO BELIEVES THERE ARE SIGNIFICANT SAVINGS TO BE MADE IN REACHING THIS GOAL BY FOCUSING ON THE MOST EFFECTIVE AND ECONOMICAL WAY TO DO THE JOB. TO ACCOMPLISH THE SECRETARY'S EFFORTS, SOME EMPHASIS SHOULD BE GIVEN TO THE NAVAL RESERVE WITH NEW OR INCREASED MISSIONS.

1. ESTABLISHMENT OF IMA'S (INTERMEDIATE MAINTENANCE ACTIVITY) AT NAVAL AIR STATIONS.

2. HOSPITAL SHIP-WITH A SCALED DOWN CREW (ACTIVE). THE MEDICAL COMPLEMENT AND SHIP OPERATIONAL UNIT WOULD BE NAVAL RESERVISTS, SIMILAR TO THE NRF FRIGATES.

3. MINE WARFARE-NAVAL RESERVE CONTROLS ABOUT 75% OF THE MISSION, THIS COULD BE INCREASED TO 100%. THE FLAG ASSIGNED SHOULD BE A SELECTED RESERVE OR TAR.

4. RECRUITING-ESTABLISH RECRUITING UNITS AND OPEN NAVY COUNSELOR RATE TO NAVAL RESERVISTS.

5. SALVAGE OPERATIONS-EXPERTISE NOW AVAILABLE IN NAVAL RESERVE.

6. INTELLIGENCE AND LEGAL-EXPAND MISSION, QUALIFIED PERSONNEL AVAILABLE IN NAVAL RESERVE.

IT IS THE OPINION OF OUR ASSOCIATION THAT THESE NEW OR INCREASED MISSIONS WOULD BE PHASED IN OVER A PERIOD OF TIME FOR CONTINUITY. WE ALSO RECOMMEND AN OUTSIDE STUDY BE CONDUCTED FOR THE NEW AND INCREASED MISSIONS. OUR REASONING FOR AN OUTSIDE STUDY IS THAT MANY TIMES THE NAVAL RESERVE RECEIVED THE SHORT END OF THE STICK WITH IN HOUSE STUDIES. i.e. NRF SURFACE PROGRAM.

COMPENSATION

THERE HAVE BEEN MANY ACTIONS INITIATED INVOLVING COMPENSATION OF ONE FORM OR ANOTHER FOR GUARD AND RESERVE PERSONNEL. VERY FEW WHICH HAVE PROGRESSED BEYOND THE INITIAL STAGES TOWARD FRUITION. SOME OF THE MOST IMPORTANT BILLS INTRODUCED CONCERNING COMPENSATION ARE HR 1495, 1496 AND 1497 (MEDICAL COVERAGE FOR GUARD AND RESERVISTS). MANY NAVAL RESERVISTS ARE REQUIRED TO USE ANY MODE OF TRANSPORTATION PROVIDED BY ANY AGENCY OF THE U.S. GOVERNMENT TO REACH DRILL AND ARE REQUIRED TO USE THE AFOREMENTIONED TRANSPORTATION WHILE UNDER TAD NOCOST ORDERS TO ATTEND DRILLS. RESERVISTS IN TRANSIT AS PASSENGERS ARE NOT CONSIDERED TO BE DRILLING WHILE TRAVELING, THEREFORE ARE NOT ENTITLED TO THE BENEFITS PROVIDED IN TITLE 10 U.S. CODE. IN SOME LOCATIONS, MESSING IS NOT AVAILABLE AT THE DRILL SITE, IN THIS CASE A RESERVIST IS NOT COVERED WHILE TRAVELING TO OR FROM A RESTAURANT TO HAVE LUNCH. THERE ARE MANY HORROR CASES CONCERNING DRILLING RESERVISTS WHO WERE INJURED OR CRIPPLED, WHILE ENROUTE AND ARE NOT ENTITLED TO ANY HEALTH CARE OR COMPENSATION. MR. CHAIRMAN, NERA WILL PROVIDE CASE HISTORIES FOR THE RECORD IF DESIRED. IN VIEW OF THE FOREGOING, NERA STRONGLY RECOMMENDS PASSAGE OF HR 1495, 1496, 1497.

MR. CHAIRMAN, WITH THE IMPLEMENTATION OF THE NAVY'S POLICY FOR ENLISTED RESERVISTS OF THIRTY YEARS AND OUT. A RESERVIST WOULD BE FORCED INTO RETIREMENT AT THE PROBABLE AGE OF UNDER 50 YEARS OF AGE.

IT IS EVIDENT THAT THERE WILL NOT BE ANY ENTITLEMENTS FOR THESE RETIREES UNTIL AGE 60. THESE HIGHLY SKILLED TECHNICIANS MUST WAIT IN LIMBO FOR APPROXIMATELY 10 YEARS WITHOUT ANY RECOGNITION OF THEIR CONTINUOUS DRILLS AND PERFORMANCE OF ANNUAL ACTIVE DUTY FOR TRAINING FOR THIRTY YEARS. NERA STRONGLY RECOMMENDS THAT EITHER CONGRESSIONAL DIRECTION BE GIVEN TO DOD OR ENACTMENT OF LEGISLATION TO PROVIDE COMPENSATION IN THE FORM OF COMMISSARY AND EXCHANGE PRIVILEGES FOR THE RETIREES WHILE AWAITING RETIREMENT PAY.

NRF SHIPS

IN FY 1981 THE CONGRESS DIRECTED THE NAVY TO TAKE CERTAIN ACTIONS:

(1) SHIP MANNING - A CREW OF 50% ACTIVE AND 50% SELECTED RESERVE WITH A PHASE IN OF TAR PERSONNEL TO REPLACE THE ACTIVE DUTY CREWS.

(2) SHIP OPERATIONS - NRF ESCORTS WILL OPERATE UNDER THE DIRECTION OF THE CHIEF OF NAVAL RESERVE.

(3) COMMAND STRUCTURE - OPERATIONAL CONTROL OF THE RESERVE DESTROYERS WILL BE SHIPPED TO THE CHIEF OF NAVAL RESERVE.

(4) HOMEPORTING - NRF SHIPS WILL BE BASED AS MUCH AS POSSIBLE ON THE DRILLING RESERVISTS' POPULATION AND FEASIBILITY OF CO-LOCATING CAPABLE SIMA UNITS.

CURRENTLY THE NAVY HAS EXPANDED THE ENLISTED TAR PROGRAM OF NINE RATINGS TO REPLACE ONLY 25% OF THE ACTIVE CREW VICE THE 50%. THE NAVY CLAIMS THAT THE TAR SURFACE PROGRAM CAN ONLY INCLUDE THOSE RATINGS "WHICH AN ACCEPTABLE CAREER PATTERN CAN BE DEVELOPED". ANOTHER REASON WAS THE ROTATION OF SURFACE TARS. OUR ASSOCIATION STATES IF A CAREER PATTERN CAN BE DEVELOPED FOR ONE RATING IT CAN BE DEVELOPED TO INCLUDE ALL SURFACE RATINGS. TAR ROTATION SHOULD INCLUDE NAVAL RESERVE CENTERS. AS INSTRUCTORS, SURFACE TARS COULD BE UTILIZED AND RELEASE USN PERSONNEL FOR OTHER DUTIES. NERA STRONGLY OPPOSES THE

NAVY'S CURRENT POLICY AS DISCRIMINATORY TO ALL SURFACE NAVAL RESERVISTS RATINGS AND RATES.

THE SHIPS OPERATION AND MANAGEMENT CONTROL GIVEN TO THE CHIEF OF NAVAL RESERVE BY THE CONGRESS IS REWORDED BY THE NAVY AND ONLY GIVES THE CHIEF OF NAVAL RESERVE THE OPERATIONAL SCHEDULING OF THE NRF FRIGATES. THE TYCOMS CONTINUE TO BE RESPONSIBLE FOR SCHEDULING OF ALL OTHER EVOLUTIONS PLUS MATERIAL, LOGISTIC AND MAINTENANCE SUPPORT OF THE NRF FRIGATES.

SCHEDULING OF THE NRF FRIGATES ARE SUPPOSED TO BE LIMITED TO APPROXIMATELY 14 DAYS PER QUARTER AND OPERATIONS WITHOUT THE COMBINED CREW EMBARKED ARE LIMITED TO EMERGENCY SITUATIONS ONLY: i.e. EMERGENCY SORTIES TO AVOID HEAVY WEATHER OR ACTIONS REQUIRED TO INCIDENT TO AN ATTACK. IT HAS BEEN BROUGHT TO OUR ATTENTION, THE USS VALDEZ, HOMEPORTED IN NEWPORT, WILL BE LEAVING FOR A 56 DAY TOUR, COMPLETELY NOT WITHIN THE SCOPE OF CONGRESSIONAL DIRECTION. NERA FORSEES MORE FLEET EXERCISES THAT ARE NOT MISSION ORIENTED AND LESS READINESS TRAINING FOR THE SELECTED RESERVE CREW AS WAS EXPERIENCED WITH NRF DESTROYERS. NERA RECOMMENDS IMPLEMENTATION OF CONGRESSIONAL DIRECTION IMMEDIATELY THAT FULL OPCON AND TYCOM BE ASSIGNED TO THE CHIEF OF NAVAL RESERVE, TO AVOID SIMILAR SITUATIONS.

IN THE AREA OF HOMEPORTING, THE MOST IMPORTANT ASPECTS OF THE PROGRAM ARE THE SELECTED RESERVE MANNING OF THE SHIPS AND CONSIDERATION OF THE MAJOR SHIPPING PORTS OF THE UNITED STATES. CURRENTLY ONLY 5 HOMEPORTS HAVE BEEN ASSIGNED AS HOMEPORTS, NEWPORT, CHARLESTON, PHILADELPHIA, LONG BEACH AND SAN FRANCISCO. OTHER HOMEPORTS HAVE BEEN RUMORED, HOWEVER, THERE HAS NOT BEEN ANY ACTION. HOMEPORTS, RUMORED DO NOT INCLUDE TWO OF THE LARGEST SHIPPING PORTS IN THE UNITED STATES, NEW YORK AND BALTIMORE. THESE TWO PORTS HAVE EXCELLENT FACILITIES AND RESERVE MANPOWER ASSETS TO MAN THE SHIPS. NERA RECOMMENDS THAT THE NAVY EXPEDITE CONGRESSIONAL DIRECTION AND IDENTIFY FUTURE HOMEPORTS FOR THE NRF FRIGATES.

THE NAVAL ENLISTED RESERVE ASSOCIATION RECOMMENDS THAT THE RECENT DECOMMISSIONED DD 931 CLASS DESTROYERS, BE PUT IN A STANDBY STATUS WITH A SMALL CREW ABOARD. THESE SHIPS WOULD BE AVAILABLE FOR ACTIVATION WITHIN A VERY SHORT TIME FRAME. ALTHOUGH THE ANNUAL COST WOULD BE SLIGHT. THESE SHIPS WOULD BE COMBAT READY FASTER WITH AN ASSIGNED CREW THAN IS NOW POSSIBLE.

## P-3 A/B TACTICAL NAVIGATION MODERNIZATION (TAC/MOD)

THE TAC/NAVMOD IS THE KEY TO MODIFYING THE RESERVE COMMUNITY P-3S TO THE ANTI-SHIP MISSION WITH THE AIR TO SURFACE HARPOON MISSLES, A CRITICAL WARTIME MISSION.

THE TAC/NAVMOD GIVES THE RESERVE PATROL AIRCRAFT A 75% IMPROVEMENT IN ASW CAPABILITY OVER THE UNMODIFIED AIRCRAFT AT A COST OF SLIGHTLY MORE THAN $1.2 MILLION PER AIRCRAFT, A BARGAIN IN ANY BUDGET. WITH THE SLOW DOWN IN THE PROCUREMENT OF THE P-3CS, MODIFICATION OF THE RESERVE BIRDS BECOMES EVEN MORE ESSENTIAL. THE PROGRAM ADDS TACTICAL NAVIGATION COMPUTER, TACTICAL DISPLAY, OMEGA NAVIGATION AND THE VERNIER AQA-7 SENSOR. THE LOCALIZATION PERFORMANCE AND THE ABILITY OF THE MODIFIED AIRCRAFT TO MEET ATTACK CRITERIA AND EFFECTIVELY DELIVER WEAPONS ARE SIGNIFICANTLY IMPROVED. AS MENTIONED PREVIOUSLY, ONE RELIABLE ESTIMATE ESTABLISHED THE IMPROVEMENT IN CAPABILITY AT 75%.

THE NAVAL ENLISTED RESERVE ASSOCIATION RECOMMENDS THAT THE CONGRESS ADD-ON $21.1 MILLION APN FUNDING TO PROVIDE FOR AN ADDITIONAL 17 TAC/NAVMOD KITS FOR NAVAL RESERVE P-3A/B AIRCRAFT AND DIRECT NAVY TO COMPLETE THE BUY OF 23 ADDITIONAL KITS IN FY 1985.

## RESERVE P-3C PROCUREMENT

THE DEFENSE DECISION TO CUT THE BUY OF P-3CS COMMENCING IN FY 1983 AND CONTINUING AT A LOW RATE OF FIVE OR SIX AIRCRAFT FOR THE FIVE YEAR DEFENSE PLAN (FYDP) YEARS IS PARTICULARLY DISTURBING AND HAS LONG RANGE IMPLICATIONS. THE REDUCED P-3C PROCUREMENT PLAN AFFECTS NOT

ONLY THE NAVAL RESERVE BUT THE NATION'S CAPABILITY TO DEFEND ITSELF FROM THE SOVIET UNDERSEAS STRATEGIC FORCE AS WELL AS THE PROTECTION OF THE SEA LINES OF COMMUNICATION.

THERE IS GENERAL AGREEMENT THAT THE MOST DANGEROUS THREAT TO THE SECURITY OF THE UNITED STATES IS THE SOVIET SUBMARINE FORCE, BOTH THE ATTACK AND THE MISSLE FIRING GROUPS. THE THREAT IS GREAT AT THIS TIME WITH THE SOVIET SUBMARINE FORCE GROWING MORE IN NUMBERS AND SOPHISTICATION EACH YEAR. TO BACK OFF A PLAN WHICH IS INADEQUATE TO START WITH, AND GO WITH ONE WHICH ACCEPTS A CUT IN THE ANTI-SUBMARINE FORCE WHEN THE ENEMY IS GROWING EVEN MORE POWERFUL, IS TO INVITE INFERIORITY.

INCLUDED IN THE RESERVE MISSION IS THE REQUIREMENT TO PROVIDE APPROXIMATELY THREE CREWS TO EACH OF THE 24 ACTIVE DUTY VP SQUADRONS. THE ACTIVE UNITS FLY ONE OF THE VERSIONS OF THE P-3C OR SOON WILL BE DOING SO. FOR THE MOST PART, THE TRAINING FOR THESE 72 CREWS CANNOT BE ACCOMPLISHED IN P-3A/B AIRCRAFT. OUR ASSOCIATION RECOMMENDS THAT CONGRESS ADD 9 P-3CS TO THE BUDGET, THREE EACH YEAR FOR THREE YEARS, TO ENABLE THE NAVAL RESERVE TO ACCOMPLISH A MISSION VERY IMPORTANT TO THE DEFENSE OF THE UNITED STATES.

THE FLYAWAY COST OF THE AIRCRAFT WOULD BE $31.1 MILLION PER AIRCRAFT IN FY 1984 DOLLARS OR $79.3 MILLION EACH YEAR FOR THE THREE PLANES. THE ADDITIONAL COST IS BASED UPON THE FACT THAT INCREASING THE BUY FROM FIVE P-3CS AND TWO EP-3S WOULD LOWER THE FLYAWAY COSTS OF EACH AIRCRAFT FROM $33.1 MILLION TO APPROXIMATELY $31.1 MILLION EACH. ALSO, THE PRICE OF EACH AIRCRAFT WOULD DECREASE APPROXIMAELTY $2.0 MILLION/AIRCRAFT IF A MULTI-YEAR CONTRACT WAS NEGOTIATED.

IT IS FURTHER RECOMMENDED THAT: (1) THE NEW UPDATE III AIRCRAFT BE ASSIGNED TO A FLEET SQUADRON ON A ONE FOR ONE EXCHANGE RATIO OF FLEET P-3CS TO THE NAVAL RESERVE P-3C AUGMENT TRAINING DETACHMENTS. (2) AN ADDITIONAL SEVEN (7) TAR OFFICER AND 93 TAR ENLISTED BILLETS

BE AUTHORIZED AND FUNDED OVER BUDGET SUBMISSION TO ADMINISTER THE RESERVE P-3C DETACHMENT.

## NAVAL AIRLIFT MODERNIZATION

THE REPLACEMENT PROGRAM, FOR THE OLD C-118 PROP AIRCRAFT, WHICH HAVE BEEN SERVING THE NAVY AND THE NAVAL RESERVE FOR SO MANY YEARS, IS IN A CRITICAL STAGE AT THIS TIME. ALL OF THE C-118S WILL BE PHASED OUT OF THE NAVAL AIR RESERVE IN FY 1984. AT LONG LAST IT APPEARS THAT EVERYONE - NAVY, OSD AND THE CONGRESS AGREE THAT THE NAVY NEEDS A MODERN ORGANIC AIRLIFT CAPABILITY. HOWEVER, A FASTER METHOD OF GETTING THERE NEEDS TO BE DEVELOPED IF WE ARE TO RETAIN AIRLIFT CAPABILITY AND KEEP THE EXPERIENCED PERSONNEL AVAILABLE TO SUPPORT THE REPLACEMENT AIRCRAFT. THE NAVY PROPOSAL ENVISIONS LEASING UP TO TEN AIRCRAFT IN FY 1984 DEPENDING ON HOW MANY ARE PROCURED WITH THE $16.2 MILLION PROVIDED FOR IN THE FY 1983 BUDGET. THE GOAL IS TO HAVE FIFTEEN REPLACEMENT AIRCRAFT ON BOARD FOR THE 30 C-118S, WHICH WILL HAVE COMPLETED PHASE-OUT BY THAT TIME. THE FIFTEEN AIRCRAFT WILL CONSIST OF THE 12 USED DC-9S OR OTHER SUITABLE AIRCRAFT TO BE LOCATED AT NAS WHIDBEY ISLAND, WA; NAS MEMPHIS, TN; NAF DETROIT, MI; NAS GLENVIEW, IL; NAS ATLANTA, GA, AND NAS WILLOW GROVE, PA. THE PLAN FURTHER ANTICIPATES PROCURING UP TO TWELVE OF THE USED AIRCRAFT WITH FY 1985 FUNDS. THE BUDGET FOR FY 1984 AIRLIFT AIRCRAFT LEASING CONTAINS $21.3 MILLION AND THE FIVE YEAR DEFENSE PLAN (FYDP) SHOWS $91.0 MILLION TO BUY NAVY TACTICAL LOGISTICS AIRLIFT AIRCRAFT IN FY 1985.

THE SECRETARY OF THE NAVY, THE HONORABLE JOHN LEHMAN, AND THE CHIEF OF NAVAL OPERATIONS, HAVE GIVEN HIGH PRIORITY TO REPLACING THE AGED C-118S IN THE NAVAL RESERVE, AND THE OSD RESISTANCE TO THE ACQUISITION OF A REPLACEMENT AIRCRAFT HAS SWITCHED TO A SUPPORTIVE POSITION. NERA HOPES THAT, THE NAVY LOGISTICS AIRLIFT CRISIS CAN BE RESOLVED AND THE GOAL OF IMPROVING THE COMBAT READINESS STATUS OF NAVY

ACTIVE AND RESERVE UNITS/INDIVIDUALS CAN BE REALIZED.

NERA RECOMMENDS THAT THE CONGRESS FUND THE PROCUREMENT OF 10 USED COMMERCIAL AIRLIFT AIRCRAFT IN FY 1984 AT AN ADDITIONAL COST OF $56.7 MILLION (USING AS AN OFFSET THE $21.3 MILLION O&MNR FUNDS IN THE BUDGET PROCESS SUBMISSION FOR AIRLIFT AIRCRAFT LEASING) FOR A TOTAL COST INCLUDING SITE SUPPORT AND INITIAL SPARES OF $78.0 MILLION. THIS WOULD SAVE AT LEAST $34.3 MILLION OVER THE NAVY PLAN. THIS WOULD COMPLETE THE SITING PLAN FOR THE AIRLIFT AT LEAST A YEAR EARLIER THAN THE NAVY SCHEDULE AND INSURE EQUITABLE AIRLIFT COVERAGE FOR RESERVE UNITS NATIONWIDE.

MR. CHAIRMAN, THIS COMPLETES OUR STATEMENT. AGAIN, WE THANK YOU FOR THE OPPORTUNITY TO APPEAR BEFORE YOUR COMMITTEE. WE WILL BE HAPPY TO ADDRESS ANY QUESTIONS YOU MAY HAVE OR TO PROVIDE ANY ADDITIONAL INFORMATION TO YOU AND TO YOUR COMMITTEE.

# AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES

STATEMENT

OF

JOHN M. ESPOSITO
CHAIRMAN, NATIONAL STEERING
COMMITTEE REPRESENTING
CIVILIAN TECHNICIANS

DUAL-STATUS CIVILIAN TECHNICIANS, WHO AS RESERVISTS MOVE THROUGHOUT THE RESERVE MILITARY CHAIN AS ANY OTHER RESERVIST, AND MOST IMPORTANT, DO NOT VIOLATE THE RESERVE STRUCTURE AND/OR HINDER THE CAREERS OF OTHER DRILLING RESERVISTS AS OPPOSED TO AGR AND ALL OTHER FORMS OF THE FULL-TIME MILITARY INFLICTED UPON RESERVE UNITS.

MR. CHAIRMAN, DISTINGUISHED MEMBERS OF THE COMMITTEE, DUE TO THE FACT THAT ALL AMERICANS HAVE A VESTED INTEREST IN THE SECURITY OF OUR NATION IT BENEFITS ALL TO STOP AN IMPRACTICAL, UNPRODUCTIVE, UNWORKABLE, COST PROHIBITIVE FULL-TIME MILITARY PROGRAM AND UTILIZE THE SYSTEM THAT HAS PROVEN ITSELF FOR THE PAST 40 YEARS, REGARDING CIVILIAN TECHNICIANS, AND FOR OVER TWO HUNDRED YEARS, REGARDING THE CITIZEN/SOLDIERS, IN TIME OF PEACE AND CONFLICT. THE PRIME BENEFACTOR WILL BE THE SECURITY AND WELL BEING OF THE UNITED STATES.

THEREFORE, WE MOST URGENTLY REQUEST THAT NO AUTHORIZATION BE GIVEN IN THIS, OR ANY OTHER AUTHORIZATIONS BILL FOR THE CONVERSION OF ANY CIVILIAN POSITION, AND/OR ADDITION OF ANY FULL-TIME MILITARY IN SUPPORT OF THE ARMY RESERVE, ARMY NATIONAL GUARD AND AIR NATIONAL GUARD BY ACTIVE DUTY OR RESERVE MILITARY PERSONNEL OR TO AUTHORIZE FUNDS FOR ANY EXISTING ACTIVE DUTY POSITIONS CONVERTED FROM A CIVILIAN STATUS AND THOSE ADDED ON ALL UNDER THE UMBRELLA OF FULL-TIME MANNING/SUPPORT, BEYOND THE INCUMBENT'S PRESENT TOUR OF DUTY. THIS CONCLUDES MY TESTIMONY.

(THE GRAFTS REFERRED TO EARLIER IN THE STATEMENT ARE RETAINED IN THE SUBCOMMITTEE FILES.)

MR. CHAIRMAN, DISTINGUISHED MEMBERS OF THE COMMITTEE, THANK YOU FOR THIS OPPORTUNITY TO BE HEARD ON THIS SUBJECT.

SINCE THE PROPONENTS OF FULL-TIME MILITARY IN THE ARMY RESERVE AND ARMY & AIR NATIONAL GUARD MISREPRESENTED THIS ISSUE IN ORDER TO GAIN CONGRESSIONAL APPROVAL, I WOULD LIKE TO LIST THE AFFECTS OF THIS FULL-TIME MILITARY PROGRAM:

A. DRILLING RESERVISTS, WHO REALLY HAVE THE VESTED INTEREST, HAVE BEEN PLACED IN JEOPARDY FOR THEY, MOSTLY UNIT MID TO SENIOR LEVEL NCO'S AND UNIT COMPANY TO FIELD

GRADE OFFICERS, ARE ABOUT TO BE INVOLUNTARILY SEPARATED FROM THE DRILLING RESERVE PROGRAM AND PLACED INTO THE IRR. THE ATTACHED GRAPHS SHOW THE NEGATIVE AFFECTS THE ASSIGNMENT OF FULL-TIME MILITARY WILL HAVE ON DRILLING RESERVISTS & GUARDSMEN (INCL #1).

B. CIVILIAN TECHNICIANS, WHO BY TERMS OF THEIR EMPLOYMENT MUST BE A DRILLING RESERVIST WILL NOT ONLY LOSE THEIR RESERVE SLOT, INVOLUNTARILY, BUT WILL ALSO BECOME A STATUS-QUO TECHNICIAN, INVOLUNTARILY, THROUGH THE LOSS OF STATUS AS A DRILLING RESERVIST (INCL #1, pg. 2)

C. MEMBERS OF CONGRESS HAVE BEEN PLACED IN A DIFFICULT POSITION BECAUSE THE ACTIONS EXPLAINED ABOVE AFFECT THEIR CONSTITUENTS AND THE MEMBERS MUST EXPLAIN WHY THEIR CONSTITUENTS ARE BEING INVOLUNTARILY REMOVED FROM THE DRILLING RESERVE STATUS AND DRILLING RESERVISTS THAT ARE ALSO CIVILIAN TECHNICIANS ABOUT TO BE PLACED IN THE POSITION OF ALSO LOSING THEIR CIVILIAN EMPLOYMENT, THE MEMBERS ARE PLACED IN DEEPER JEOPARDY.

D. THE AMERICAN TAXPAYER HAS HAD TO REACH FURTHER INTO HIS POCKET TO FINANCIALLY SUPPORT THIS FULL-TIME MILITARY PROGRAM (INCL #2). THE ADDITIONAL DOLLARS SPENT BY THE AMERICAN TAXPAYER ARE NOT BUYING ADDITIONAL READINESS. IN FACT, THERE IS NO CHANGE IN THE MANNER OF TRAINING RESERVE UNITS AND INDIVIDUALS WITHIN THEM. READINESS AND THE ASPECT OF A UNIT TO SUCCESSFULLY ACCOMPLISH ITS MISSION IS REDUCED BY THE ADDITION OF FULL-TIME MILITARY, WHICH HAS A NEGATIVE IMPACT ON RESERVE UNITS.

E. THE NATION'S SECURITY HAS BEEN PLACED IN JEOPARDY, FOR, WE BELIEVE, ALL THOSE DRILLING RESERVISTS ABOUT TO BE INVOLUNTARILY RELIEVED OF THEIR UNIT POSITION AND TRANSFERRED INTO THE IRR (INCL #3 pg 4) WILL NOT RETURN TO MILITARY SERVICE IN TIME OF CONFLICT. AGAIN, THESE ARE MID-LEVEL TO SENIOR NCO'S AND COMPANY TO FIELD GRADE OFFICERS. IN PLAIN ENGLISH, THERE WILL NOT BE AN EXPERIENCED POOL OF RESOURCES TO DRAW FROM AS REPLACEMENTS FOR THOSE INCAPACITATED ON THE BATTLEFIELD, THEREBY JEOPARDIZING SUCCESSFUL UNIT ACCOMPLISHMENT. OR AGAIN, IN PLAIN ENGLISH, WINNING.

F. THE ENTIRE CITIZEN/SOLDIER CONCEPT, THAT FORMULA WHICH HAS SUCCESSFULLY BROUGHT US TO THIS VERY MOMENT, IS UNDER CHALLENGE. A LARGE AND EXPERIENCED PORTION OF THE CITIZEN/SOLDIERS, IN OTHER WORDS, THE DRILLING RESERVISTS, THAT AT THIS POINT IN TIME REPRESENT 69% OF OUR TOTAL FORCE, WHICH MEANS THAT RESERVE UNITS WILL BE CALLED TO SERVE AT THE VERY BEGINNING OF ANY HOSTILITIES ARE ABOUT TO BE INVOLUNTARILY REMOVED. DO THE MEMBERS REALLY BELIEVE THAT THIS ACTION HAS A POSITIVE BEARING ON READINESS? I THINK NOT. IN SHORT, GENTLEMEN, EVERYONE IS ON THE SPOT, INCLUDING THE INDIVIDUALS ON THESE FULL-TIME TOURS, EXCEPT THE PROPONENTS OF THIS PROGRAM WHO CONTINUALLY MISREPRESENT THIS ENTIRE FULL-TIME MILITARY PROGRAM IN ORDER TO GAIN CONGRESSIONAL FUNDING FOR IT. THAT IS THEIR TRUE INTEREST---THEIR INTENT AFTER RECEIVING THE FUNDING APPROVAL IS WHATEVER THEY WANT.

AT THIS POINT, ON BEHALF OF MYSELF AND CIVILIAN TECHNICIANS EVERYWHERE, I WOULD LIKE TO THANK THE MEMBERS FOR THE LANGUAGE CONTAINED IN THIS YEAR'S CRA LANGUAGE BASED ON YOUR CONCERN FOR A STRONG AND VIABLE RESERVE FORCE WHICH, WE BELIEVE, YOU REALIZE CAN, AND MUST, BE ACHIEVED THROUGH THE UTILIZATION OF DUAL STATUS CIVILIAN TECHNICIANS WHO DURING THE REGULAR WORK WEEK PERFORM MANY, MULTI-FACETED TASKS IN ALL AREAS OF THE UNIT THEY SERVICE, AS OPPOSED TO AGR SITTING IN CONVERTED CIVILIAN SLOTS.

HOWEVER, GENTLEMEN, LET US GO OVER THE SERIES OF EVENTS SINCE THE CRA HAS BEEN IN FORCE REGARDING THE CONGRESSIONAL MANDATES SPECIFIED IN THAT RESOLUTION:

A. THE SECRETARY HAS NOT HIRED ABOVE THE CIVILIAN TECHNICIAN CEILING BY 2% (INCL #4).

B. THE 43 SENIOR CIVILIAN TECHNICIANS SPECIFICALLY REFERRED TO AS POSITIONS WHICH WOULD NOT BE REMOVED HAD TO BE SAVED BY THE MEMBERS OF THE HOUSE APPROPRIATIONS COMMITTEE IN FEBRUARY OF 1983, SOME 3 TO 4 MONTHS AFTER SPECIFIC LANGUAGE PROHIBITED ABOLISHMENT OF ANY SORT (INCL #4 & 5).

C. CIVILIAN HIRING FREEZE (INCL #6).

D. ATTEMPTS TO HIRE DUAL-STATUS TECHNICIANS ON A TEMPORARY BASIS (INCL #6).

E. OPM JOB REVIEWS, INITIATED AT THE REQUEST OF FORCES COMMAND (FORSCOM), AIMED AT DOWNGRADING OF CIVILIAN TECHNICIAN JOB LEVELS WHICH INCIDENTALLY THE AVERAGE IS GS-6, 5 (INCL #7).

F. PARTICULARILY IN THE NATIONAL GUARD THE ATTEMPTS TO CIRCUMVENT CONGRESSIONAL MANDATE BY RANDOMLY MOVING CIVILIAN SPACES FROM THE GS TO WG SIDE OF THE HOUSE. I AM SURE THE MEMBERS WILL RECALL THAT THE ORIGINAL REASON FOR THIS ENTIRE EXERCISE WAS THE ALLEGED HIGH COST OF WG PERSONNEL. SUCCESSFUL CONVERSION OF WG POSITIONS COULD NOT BE ACCOMPLISHED.

G. TRUE COST FIGURES BY COMPONENT, WHICH WERE TO BE FURTHER EVALUATED BY GAO, HAVE YET TO BE FURNISHED.

H. MANAGEMENT PLANS FOR THIS MILITARY PROGRAM ARE ATTACHED HERE AS INCL #8. IN A CAPSULE, THEY VIOLATE ALL REASONS FOR INSITITUTING THIS PROGRAM, ARE FROUGHT WITH PCS MOVES BETWEEN RESERVE UNITS AND ACTIVE ARMY ASSIGNMENTS, VIOLATES EMPLOYEE AND RESERVE UNIT CONTINUITY AND RECONFIRMS WHAT I HAVE SAID ABOVE REGARDING THE FATE OF DRILLING RESERVISTS AND DUAL-STATUS TECHNICIANS. THESE MANAGEMENT REGULATIONS ARE AR 135-18, EFFECTIVE 15 JUNE 1983, AND FORCES COMMAND REGULATION 135-1, DATED 1 MAY 1983, WHICH I ENCOURAGE EVERY MEMBER TO READ.

BE ADVISED THAT FOLLOWING OUR APPEARANCE BEFORE THE HOUSE ARMED SERVICE COMMITTEE (STATEMENT ATTACHED), A RESOLUTION HAS BEEN MADE TO INCLUDE CIVILIAN TECHNICIANS OF THE RESERVE COMPONENTS IN A TEST EXEMPTING INDUSTRIALLY FUNDED ACTIVITIES FROM THE CONSTRAINTS OF CIVILIAN PERSONNEL CEILINGS. THE LIFTING OF THESE CONSTRAINTS, WE BELIEVE, IS THE TRUE ANSWER TO A COST EFFICIENT, VIABLE AND READY RESERVE.

# PREPARED STATEMENT OF THE NATIONAL FEDERATION OF FEDERAL EMPLOYEES

Mr. Chairman and Subcommittee Members: The National Federation of Federal Employees appreciates the opportunity to present its views on fiscal year 1984 appropriations for the Defense Department. Nearly half of our membership is employed by DOD, so we are deeply interested in the subject of today's hearings. Two issues are of special concern to us: contracting out and the conversion of civilian technician positions to full-time military.

NFFE has long been concerned about the serious problems with the management and control of contracting procedures. Despite the existence of Office of Management and Budget Circular A-76, the procedures involved in contracting out commercial and industrial type functions are constantly abused or ignored. The results are cost overruns, shoddy workmanship, sole source contracts and a waste of tax- payer dollars. Yet, instead of tightening contracting out procedures by requiring greater cost and quality control, the Administration, with its revisions to A-76, will weaken them.

Under the proposed revisions to A-76, the requirement for cost efficency, which is the primary concern of the American taxpayer, would be virtually eliminated from the process. NFFE believes that requiring cost comparisons before any function is contracted out, is the only way to assure that the American taxpayer gets full value for his tax dollar. Under the existing regulations it is quite difficult to recapture a function once it has been contracted out, but under the new proposal additional hurdles will be added. These will strongly discourage performing a cost comparison on any function which has been contracted out, regardless of the magnitude of cost overruns.

Elimination of the cost comparison requirement, as proposed in this draft circular, will cause widescale hardship among employees of the Federal Government, who are already demoralized and disgruntled. It has been estimated that the new proposal could affect 100,000 employees of the Department of the Air Force; 150,000 employees of the Department of the Army; 10,000 employees of the Marine Corps; 180,000 employees of the Navy and 125,000 civilian agency employees, for a total of 565,000 employees.

The threat of job losses affecting more than a quarter of current Federal employees will cause further deterioration of employee morale, create further employee distrust and will fuel antagonism toward management. Moreover, it will impair the government's ability to do the job the public expects of it. The controversy brewing over the proposed sale of the Earth Satellite System of the National Oceanic and Atmospheric Administration is only the tip of the iceberg as far as citizen opposition to the loss of valued government services performed by civil servants.

The proposed new Circular A-76 constitutes a swindle which is being perpetrated upon the American taxpayer in the name of government economy. In reality, its extreme bias in favoring contracting out without cost comparisons is a give-away to big business. According to the proposed revision, all commercial functions now being performed by Federal employees must be reviewed for possible contracting out by October 1984 unless OMB grants an exception. Performance of the following types of commercial activities by contractors will be virtually automatic: those performed by the equivalent of 10 or fewer full time Federal employees and new commercial activities, termed new requirements. By means of this proposal, OMB has tried to set aside most commercial functions as a privileged preserve for business interests, immune from outside scrutiny.

OMB has also tried to narrowly constrict the scope of the internal appeal process, and has tried to preclude judicial or arbitral review. The draft regulations provide that if employees detect flaws in the in-house estimate, the in-house estimate will not be considered and the contract will be awarded. The only conclusion that can be drawn is that this draft is intended to cause a wholesale loss of Federal jobs regardless of whether contracting out would be cost effective.

No one knows the true extent of the Government's contracting out activities. If pressed, the Administration could not explain to the American people exactly where one tax dollar out of every four eventually goes. While the revised Circular does nothing to assess the size of the hidden empire of contract employees, it imposes stringent reporting requirements concerning lost Federal jobs, in Part I, Chapter 4 of the Supplement. While there are a multitude of reporting requirements in terms of the number of full time equivalent Federal employee jobs which have been eliminated, there are absolutely no requirements as far as reporting contractor employment. Presumably the administration will trumpet the number of Federal employee jobs eliminated, conveniently avoiding any reporting of contractor employment. Even though the regulation repeats the requirement that jobs should not be contracted out because of personnel ceilings, it imposes no obligations upon agencies to enforce this statutory requirement.

What follows is a sectional analysis of the major weaknesses in the proposed regulation.

NFFE objects to several of the definitions contained in Section 6 of the proposed Circular. The draft defines conversion to contract as the "changeover of an activity from Government performance to performance under contract by a private commercial source." The Circular then defines a private commercial source to include a university or any other non-Federal activity. While both these definitions are identical to those contained in the current Circular, it is hard to understand how performance by a not-for-profit university facilitates the goals enunciated by the new Circular: to rely on private enterprise to provide commercial goods. Universities and other nonprofit institutions hardly constitute "private enterprise" as the term is commonly understood. NFFE would propose that a private commercial source be limited to profit making institutions, which are truly in the "private sector." Reliance on a university to complete a task hardly fosters free enterprise any more than reliance on government does.

The definition of government function has been narrowed from that contained in the 1979 version. The new definition requires that the task be so intimately related to the public interest as to mandate performance by government employees. Previously, all that was required was a special relationship in executing governmental responsibilities. The definition of government function must be considered along with the newly limited exemption for continuing governmental performance because an activity is required to perform an agency's basic mission. The written rationale showing the impact in terms of cost and performance for this justification must now be approved by an assistant secretary or equivalent. No such high level approval was required under the earlier section 8.a.

At the heart of OMB's giveaway to the private sector are the changes governing the conduct of reviews, contained in Part I, Chapter 1.C. Bear in mind that in conducting any new reviews, agencies will be laboring under the September 30, 1984 deadline which will be imposed by section 9.e. of the Circular. That arbitrary provision will guarantee that forthcoming cost comparisons will be avoided where at all possible, and that those that are conducted will, of necessity, be conducted in a shoddy fashion. We think that imposition of this deadline smacks of political considerations.

The cost comparison process has been dangerously undermined by the threshold contained in Part I, Chapter 2.A. This requires that commercial activities involving 10 or fewer full time equivalents (FTEs) should be contracted out without conducting cost comparisons. Cost comparisons for larger activities can be waived by the head of an agency or his designee upon a written determination that effective price competition is available and that the in-house operation has no reasonable expectation of winning the competition. Yet cost comparisons remain the only means to assure that the cheapest method is used.

Under the previous threshold, a cost comparison did not have to be conducted where the annual operating cost was $100,000 or less. While the average operating cost of an activity employing 10 or more FTEs is not available, it suffices to say that the new figure represents an astronomical leap. Even more outrageous is the fact that the new circular opens up a giant loophole in the form of an exemption from the cost comparison process where the agency head or his designee feels that effective price competition is available and the inhouse operation has no reasonable expectation of winning the competition. This must be compared with the rigorous requirements to justify in-house retention because no commercial source is available.

The threshold contained in the proposals is beautiful in its simplicity yet potentially devastating in its budgetary impact. The proposed threshold could not have been more favorable to private contractors and less considerate of the taxpayers, if it had been drafted by the contractors themselves. The size of an activity's workforce bears little, if any, relationship to the size of its annual budget: 10 employees could manage activities with yearly budgets ranging from $400,000 to $4 million or perhaps $400,000 million. But according to the new standard these activities, with few exceptions, would be contracted out, regardless of whether Federal workers can perform the work better or at less cost.

NFFE strongly opposes the umbrella type contracting which is preferred by OMB in paragraph C.1.b. We believe that such consolidation of different functions into one contract unfairly promotes contracting out, by lumping together marginal and cost effective government operations. It is also more formidable to appeal such a contract because it is so much more complex. This procedure also more readily facilitates "buy-ins".

The proposed language strongly encourages contracting out all expansions. These are defined as the modernization, replacement, upgrading or enlargement of existing governmental commercial activities. The language of the old Circular required that they be reviewed as if they were existing activities. The draft requires that before an expansion may occur, the whole operation must be reviewed to determine whether it is authorized under paragraph 8 of the Circular. We view this as strong bias in favor of contracting out.

The new circular would make it almost impossible to recapture an existing contract for in-house performance, as it imposes an impossible series of hurdles which must be cleared before a cost comparison can even be conducted. The language of paragraph C.3. provides that the comparison may be performed only if (1) in-house capability is established; (2) it is demonstrated that reprocurement will not result in meaningful and effective competition; (3) informal review indicates substantial savings in excess of 10% of government personnel related costs plus 25% of the acquisition cost of any additional equipment and facilities; and (4) the savings are documented in writing and the cost comparison is approved by a senior agency official. This means that even if there is a cost overrun of 100%, it is highly unlikely that the work will be returned to in-house performance. Instead, contractors will have another opportunity to milk the government for all its worth. Our position is that prior to renewal of an existing contract or prior to reprocurement, a cost comparison should be performed.

A large gift has been given to contractors on "new requirements", the new name for "new starts". Under the old Circular a "new start" was a newly established government commercial or industrial activity which might then be subject to the cost comparison process. Under the definition of new requirements, such a function never becomes a governmental function if it does not fall within one of the three categories enumerated in section 8. Thus, cost comparisons will never be undertaken. Under paragraph 9(e) of the old Circular a cost comparison would be carried out, though to justify in-house performance, the savings if performed by the government did have to be substantial. We believe that the current economic condition of the government precludes the arbitrary assignment of any new function to contractor performance. It is mandatory that the most economical option be determined through a cost comparison study. Not only should cost comparisons be made mandatory, but the previous savings which had to be shown should be eliminated.

There are major defects in the Circular concerning challenges to contracting out decisions. OMB would preclude scrutiny of decisions made under the Circular, except for the narrow review enunciated in Part I, Chapter 2.I. of the Supplement. Paragraph 7. k. of the Circular provides that the Circular only provides administrative discretion to heads of agencies and does not establish any substantive or procedural rights to challenge agency action. OMB seemingly denies the mandatory nature of the Circular or at least denies that Federal employees have a vital stake in the fair and equitable administration of contracting out under the circular. OMB has attempted to exclude outside review by providing in Part I, Chapter 3, Section I that the appeal procedure "does not authorize an appeal outside the agency or judicial review," and that "the procedure and the decision upon appeal may not be subject to negotiation, arbitration, or agreement with any party." OMB is simply overreaching its authority by these statements and should delete these provisions from the Circular. The question of whether judicial review is available is one for the courts to decide on a case by case basis. As to arbitration and negotiation, that is a matter for the Federal Labor Relations Authority to resolve, as it is primarily charged with making such decisions.

The limitations on the scope of the appeal contained in Section I are quite unreasonable. Employees should have some opportunity to show that a more cost effective organization could have been devised. They should not pay for the supervisors' failure to streamline the operation, but should have an opportunity to challenge this determination, since it forms the basis upon which the in-house cost is determined. The Circular is particular unfair to employees, as it provides that if a serious defect in the Government's in-house estimate is discovered, which cannot be corrected before the expiration of bids or offers, the in-house estimate will not be considered.

The mechanics of the appeal process are also unfair to employees. While the appeal provision now guarantees employees information and documentation if they wish to file an appeal, the information provided them is woefully inadequate. If the decision is to contract out, the only information employees get is the in-house cost estimate with supporting data, the completed cost comparison form and the name of the winning contractor. If the contractor loses and the decision is to retain the function in-house, the defeated contractor receives the in-house estimate with all the supporting data, the completed cost comparison form and the price of the bidder whose offer was most advantageous to the Government. The employees get little information about the winning contractor's bid, while the contractor gets everything about the government estimate.

The requirement that the appeal be received within 15 calendar days from receipt of the supporting documentation is an unrealistic deadline. At a minimum, 30 days are needed to file the appeal, though 45 days would be fairer. We recommend that the regulation be changed to first require that employees file a notice of intent to appeal within 10 days, that they then be given copies of the documents to which they are entitled and that they then be given 45 calendar days to file the appeal. They should not have to demonstrate that the result of the appeal will change the cost comparison decision, as employees may be unable to ascertain the exact dollar value of a particular error. Any proven error on any line should be a basis for overturning the contract, unless the error is clearly de minimus in nature.

The new draft also contains inequities in the allocation of costs between the government estimate and the contractor estimate. For instance, while the new table for estimating the cost of contract administration is an improvement over the current scheme, we believe that the only equitable figure for contract administration is one based on past performance. OMB policies on the allocation of standby costs and concerning the computation of the cost of fringe benefits are manifestly unfair and give contractors an advantage over existing employees.

We urge you to reverse the historic bias against government employees and to control the increasing costs associated with contracting out. The citizens of this country, as well as their loyal civil servants have a right to expect fair and equitable treatment from their government. That means that head-to-head competition should be conducted before any function is awarded to an outside contractor. And it means that the terms of the competition, as far as allocation of costs, should be fair. Finally, provision should be made for review by neutral parties to assure compliance with the Circular.

* * *

For over sixty years, civilian technicians have helped maintain the Guard and Reserves as an effective fighting force. Beginning with the National Guard in 1916, as each Reserve component in the Army and Air Force became a key link in our national defense, and therefore, in need of full-time administrative, training, and maintenance support, civilian technicians were called upon to provide it. The Defense Department could have assigned active duty personnel to this critical mission. But then, as now, civilian technicians were recognized as the group best able to accomplish the task. Today, technicians are stationed in every state and territory in the Union, at thousands of bases and armories, constantly ensuring that our Guard and Reserve forces are ready to meet any foreign or domestic crisis.

Yet, despite their proven value to the Nation, technician conversions are but the latest in a series of recent attempts to either completely abolish the civilian technician workforce or its long-held right to union representation.

As you are all aware, the conversions originate with the fiscal year 1979 defense appropriations bill. The committee report (95-1398) which accompanied the bill instructed the Army and Air Force National Guard and Reserves to conduct a test to determine the "desirability of elimination of dual-status technicians either completely or only for certain reserve components, costeffectiveness of technicians versus full-time military, impact on readiness, etc."

From the moment NFFE learned of the imminent conversions, we, and our civilian technicians, argued against them. On numerous occasions before Congressional committees, and in numerous meetings with key officials, we stated our objections and backed them up with extensive documentation. For the benefit of today's proceedings I will list the most important ones.

First, it will be difficult to recruit qualified active-duty replacements for civilian technicians. This will be especially true in the wage grade area, which comprises nearly half of the technician workforce.

Second, readiness of Guard and Reserve units will suffer drastically because of the loss of experienced full-time support personnel.

Third, rather than saving money it will be more expensive to maintain an active-duty force vis-a-vis the civilian technician program. This is especially true today now that military personnel have received pay raises in recent years substantially higher than civilian employees.

Each of these points, in themselves, should be enough to discourage technician conversions. Taken together, however, they represent an overwhelming case for the continuation, indeed, the expansion, of the technican program to meet the full-time support requirements of the Guard and Reserves.

Admittedly, NFFE's arguments were met with skepticism when first presented on Capitol Hill. This, I believe, was due largely to the persuasiveness of the National Guard Association and its allies, which had convinced many legislators that union activity had seriously damaged the military effectiveness of the technician program. Since the NGA had failed in its attempt to legally prohibit unionization of technicians, it appealed to Congress to simply eliminate technicians altogether and replace them with active-duty military personnel.

Our opponents, however, have consistenty failed to offer specific reasons why unionization in general impairs the ability of the Guard and Reserves to meet readiness requirements. Examples are rarely, if ever, offered of union contracts or activities which interfere with the military command structure; just broad accusations.

By law, unions are prohibited from negotiating aspects of employment which relate to the technicians' military duties. Only civilian working conditions, employment rights, and grievance procedures fall within the scope of collective bargaining agreements. In fact, NFFE would be glad to furnish the Committee with copies of its Local contracts to show that no items are included which in any way interfere with a unit's capability to carry-out its military mission.

Civilian technicians are not seeking to deemphasize their military duties. They are extremely proud of their role in national defense and have no desire to minimize it. Whether or not technicians are unionized has no bearing whatsoever on their commitment, or ability to perform their jobs.

Last year, Congress finally recognized the accuracy of NFFE's arguments and that, perhaps converting civilian technician positions to full-time military slots was not in the best interests of national defense. It placed a moratoriam on additional conversions in Public Law 97-377, the continuing resolution enacted on December 21, 1982 and effective through the current fiscal year.

We hope the moratorium will be made permanent and that, sometime in the near future, those positions already converted to active-duty military will be converted back to civilian technician positions. The Subcommittee can be of great assistance in this area by providing sufficient civilian personnel slots to meet the full-time support requirements of the National Guard and Reserves. In recent years, personnel ceilings in conjunction with the conversion program have virtually guaranteed that full-time support personnel would be recruited from the military. But now that the conversion program is being deemphasized, if not totally eliminated, only personnel ceilings remain as a threat to civilian technicians as well as Guard and Reserve full-time support requirements.

In summary, NFFE strongly supports the continuation of the civilian technician workforce. The expertise and experience of technicians improve readiness. Contrary to some claims there are no additional costs associated with the use of civilian technicians. Indeed, as Congress soon discovered, military personnel are more expensive. We also have found no labor-management relations problems stemming from union activities.

A sound national defense program, the rights of a significant segment of the Federal workforce, and the financial security of thousands of employees and their families, are sufficient grounds for an end, once and for all, to the conversion program. The temporary moratorium on technician conversions approved by Congress last December should therefore be made permanent. And there should be sufficient civilian personnel positions authorized to to minimize the need for active-duty military to provide the full-time support requirements of the National Guard and Reserves.

Before I conclude, I would like to discuss one further issue. As I am sure you are aware, there has been a problem for quite some time within the National Guard Bureau concerning the civilian versus military status of technicians. The problem has reached the point where technicians feel it is intolerable. Some form of action is necessary, and we ask the Subcommittee's assistance.

Civilian technicians work during the normal 40-hour week as civilians, much as other employees within the Department of Defense. However, they must also belong to the National Guard in order to retain their civilian positions. This dual status causes several problems, one of them being housing.

DoD personnel must occupy Government quarters when traveling on tempory duty assignments (TDY). Civilian employees of DoD are housed according to their civilian grade; the higher the grade, the better the quarters. The military are housed based upon their military rank. Although technicians are in a civilian status more often than not while on TDY, they are nevertheless housed according to their military rank. Since most techicians occupy civilian positions at a much higher grade then their military rank, this policy places them in less adequate quarters. To complicate matters, the housing for enlisted personnel is often far below the standards required by agency regulation.

On May 21, 1981 the chairman of the House Defense Appropriations subcommittee addressed a letter to Casper Weinberger, Sécretary of Defense, listing several requirements which Army Reserve and National Guard technicians must follow. One of these was, "Military technicians will occupy government quarters based on military grade when in a travel status." Since that date the NGB has revised its regulations to redefine all dual status technicians as "military technicians." In addition, they have changed their regulations to mandate that technicians occupy quarters based on military rank.

In a TDY trip to Eglin Air Force Base, members of NFFE Local 1669, from Fort Smith, Arkansas, were housed in substandard quarters, contrary to Air National Guard regulations and Air Force regulations, as well as to their negotiated agreement. The technicians' Commander knew the quarters were inadequate, but Eglin's billoting officer would not give a substandard release so they could occupy other quarters. Approximately 50 people were housed in a facility that could accommodate barely half that many. Aside from the shabby, crowded conditions there were safety hazards throughout the entire building. In addition, there was one bus, a 28-seater, to carry more than 50 individuals to and from work. There was no transportation at lunch, yet they were denied access to the mess hall. They finally had to rent vehicles to travel around.

Unfortunately, this is not a unique situation. We therefore ask the subcommittee to instruct the National Guard Bureau and the services to institute a policy which requires technicians to occupy quarters when on TDY based on their civilian grades when in civilian status, and their military ranks when in a military status. Without these changes, technicians will no longer volunteer for TDY and defense readiness will be adversely affected.

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MILITARY ACCESSORIES SERVICE ASSOCIATION, INC.
C/O AKIN, GUMP, STRAUSS, HAUER & FELD

## STATEMENT

### of the Military Accessories Service Association

The Military Accessories Service Association (MASA) represents eight small businesses that manufacture and supply the full range of military insignia to all branches of the armed services. As a full service industry, MASA companies not only manufacture a large number of insignia, but also provide the special distribution and service needs associated with the difficult job of supplying 12,000 different insignia products wherever U.S. service personnel are located. The market for insignia is characterized by a number of unique factors:

1. a responsive supplier must carry a large number of items;
2. the demand for these items is often very small, sporadic and unpredictable;
3. customers often require overnight delivery and other special services because of the morale/intangible values associated with insignia;
4. these items must be priced at inexpensive levels; and
5. the market is dominated by one customer, the U.S. service men and women who purchase approved items through the Military Exchange system.

Prior to 1973, the military services sold insignia procured by the Defense Personnel Support Center at clothing sales stores located outside the Exchange system. At the same time, the Exchanges sold military insignia procured from commercial sources. Beginning with the Air Force in 1973, these two operations were consolidated, and now military insignia are sold exclusively through the Exchange system.

Following consolidation, Congress determined that DPSC was artifically subsidizing the sale price of its insignia, thereby wasting tax-payer dollars and unnecessarily threatening the viability of commercial insignia suppliers. Congress noted that these insignia companies, which were crucial to the efficient supply of insignia because of the unique characteristics of the insignia market, could not surive as long as this subsidization and unfair competition continued. Therefore, beginning with the 1981 Department of Defense Appropriations Bill, Congress required DPSC procured and managed items to be priced at a level that would ensure full cost recovery. This congressional requirement has been reenacted in the 1982 and 1983 Department of Defense Appropriation Acts. However, the 27.6 percent adjustment which DPSC has made in the price of insignia does not fully compensate DPSC for its costs in the views of MASA. Moreover, DPSC has completely ignored the instructions of the House Defense Subcommittee to cease competing with commercial companies in the supply of non-issue insignia, meaning insignia other than those initially issued to inductees.

The record clearly indicates that Congress took this action because it found that DPSC could not efficiently supply non-issue items and was wasting tax-payer dollars. For example, it was noted that, in May of 1981, the Department contracted to purchase 1600 pair of miniature Air Force four-star general insignia when only 13 officers in the Air Force held the rank of four-star general. Further illustrating this point, DPSC has an inventory of over 1 million soldier patches for the 69th Division, a unit deactivated in 1952.

It is apparent to MASA that this mismanagement and waste continues. The recent contracts that DPSC has entered into show no change in pattern over the last few years. If anything, DPSC is expanding its wasteful procurement practices. The only thing that will change this pattern of mismanagement is congressional action.

In fact, the Logistics Systems Analyis Office of the Department of Defense has also concluded that DPSC should not duplicate the supply of insignia procured through the Exchanges from commercial sources. This conclusion was reached in a November, 1982 study by the LSAO. The study suggested that one alternative in dealing with the problem of duplication was to limit DPSC solely to the procurement and management of items initially issued to inductees, as Congress recommended in the FY 83 DOD Appropriation Bill. Such a policy would be consistent with the DOD principle of "one-item, one-manager" as set out in the June 16 memorandum of the Deputy Secretary of Defense. The express purpose of this memorandum was to eliminate dual management of consumables within the military supply systems.

MASA understands that, following the consideration of this study and the alternatives that it lays out, a draft directive was prepared by the Department instructing DPSC to limit its procurement solely to "insignia items initially issued to recruits at no personal cost, and the supplementary issue of those items. The exhanges will manage all other insignia items." Nevertheless, that directive will not be issued according to our sources at the Department. The only option that remains to avoid continued mismangement and waste of tax-payer dollars, according to the Department's own study, is for the Congress to prohibit DPSC's procurement and management of non-issue insignia items.

Attached to this statement is draft legislative language which would accomplish the two recommendations MASA offers to this Committee. First, it would prohibit DPSC from procuring non-issue insignia. As a consequence, the duplication, waste, and ineffiency which has characterized the procurement of these items would end, and the military exchanges would henceforth exclusively manage non-issue items. Second, the draft language modifies the provision contained in the last three DOD Appropriations Bills relating to insignia by ensuring that the cost-recovery provision is fairly implemented by the Department and all of its costs are reflected in the resale price. In this way, absolutely no taxpayer money would be used to subsidize the cost of insignia.

The MASA companies respectfully request that this Committee adopt its suggested language to prevent not only the demise of our companies but also to eliminate waste and preserve taxpayer dollars.

Suggested Legislative Language

SEC. ___. None of the funds appropriated by this Act shall be available for the purchase of insignia for the purposes of resale. The sales price of any insignia purchased, using appropriated funds, for the purpose of issue to service personnel and sold as replacements, and the sales price of any insignia previously purchased for resale, shall be adjusted upward by at least thirty-five percent or more to the extent necessary to recover the cost of purchase of such insignia, and the estimated cost of all related expenses, including, but not limited to, management storage, handling, transportation, loss, disposal of obsolete material, and management fees paid to the military exchange systems. Provided, that amounts derived by the adjustment covered by the foregoing limitations may be credited to the appropriations against which the charges have been made to recover the cost of purchase and related expense.

## SUBCOMMITTEE RECESS

Senator STEVENS. Are there any other witnesses that wish to testify other than members of the Department of Defense? If not, this hearing will be recessed subject to the call of the Chair.

Thank you very much.

[Whereupon, at 10:48 a.m., Wednesday, April 20, the subcommittee was recessed, to reconvene at the call of the Chair.]

# DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1984

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TUESDAY, MAY 10, 1983

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, D.C.*

The subcommittee met at 10 a.m. in room SD-192, Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Garn, Andrews, Kasten, and Proxmire.

## DEPARTMENT OF DEFENSE

### ASSISTANT SECRETARY OF DEFENSE FOR INTERNATIONAL SECURITY

### STATEMENT OF RICHARD PERLE, ASSISTANT SECRETARY OF DEFENSE FOR INTERNATIONAL SECURITY

### OPENING STATEMENT OF SENATOR PROXMIRE

Senator **PROXMIRE** [presiding]. The subcommittee will come to order.

Unfortunately Senator Stevens is delayed. He is the assistant majority leader and, as you know, he is opening the Senate this morning. Because he is on the floor of the Senate, he could not be here. I understand he wants me to go ahead. So I will deliver my statement and then Mr. Perle can go ahead and we will have some questions for him. I am sure Senator Stevens will be here shortly.

I want to express my appreciation to Chairman Ted Stevens who solicited ideas from subcommittee members about our hearing schedule and gave his approval for this hearing today.

### CAPPING U.S./U.S.S.R. NUCLEAR ARSENALS

The question before the subcommittee is: What specific military benefits would flow from capping and ultimately reducing the nuclear arsenals on both sides?

In the great debate over the nuclear freeze resolution or the administration's arms control proposals, it is easy to overlook the central relationship between arms control and our military posture. Yet any final decision on arms control must be predicated on an assessment of its contribution to the security posture of the United States.

## ADVANTAGES TO ARMS CONTROL

Arms control, after all, is an adjunct of military strategy. It is not an alternative, or a supplement, but an integral part of any nation's strategic planning.

Looked at from a practical and cost effectiveness viewpoint, arms control can accomplish some military goals that competition alone cannot resolve. For example, arms control can improve the credibility of the U.S. deterrent if it reduces the threat and preserves our assured destruction capability.

Arms control can reduce the degree of uncertainty about the nature and schedule of Soviet strategic programs. Arms control can improve our ability to identify, count, predict, and verify Soviet military developments. Arms control can curtail competition in new technological arenas. It can reduce the chances of accidental war or the possibilities of mistaken assessments of intent.

All of these are strategically important contributions that cannot be assured by unilateral weapons development programs.

We made significant progress toward arms control under the Johnson and Nixon administrations. SALT I and the ABM Treaty are the product of that era. And under the Carter administration SALT II was negotiated but not ratified. The current administration has opened up negotiations on strategic weapons—the START talks—and on European theater weapons.

Still there is a growing feeling in this country that arms control has come to a halt or at least slowed down measurably. The freeze movement is a reaction to that perception—right or wrong—that arms control has run out of gas.

What I hope our witnesses can do today is demonstrate that progress can be made with a tough minded, realistic approach to arms control that emphasizes tangible benefits, the improvements to our defense posture, the enhancement of our intelligence capabilities, the lessening of tensions by reducing unpredictable behavior, that would come from a sound arms control agreement.

What we are talking about with arms control is naked self-interest—our interest in surviving, our interest in remaining safe from attack, our interest in reducing the chance of misconception leading to crisis, our interest in remaining strong without an endless arms race.

I believe this is a common base for all Americans to agree upon regardless of their stance on the freeze or the administration's policies. If we can create this climate for a nonideological commitment to arms control based on practical benefits, then a very worthwhile purpose will have been served.

## INTRODUCTION OF WITNESSES

We have a distinguished lineup of defense experts with us today beginning this morning with Assistant Secretary of Defense Richard Perle, followed by Gen. David Jones, U.S. Air Force, retired, the former Chairman of the Joint Chiefs, Raymond Garthoff, a Sovietologist and participant in the SALT I negotiations, and later in the morning, Kenneth Adelman, the Director of the Arms Control and Disarmament Agency.

I see that Chairman Garn has joined us. I apologize, Senator Garn. It was suggested I go ahead in the absence of the chairman of the subcommittee, Senator Stevens. So I did so. I didn't have any idea you were coming as promptly as you were or I would have waited for you.

Senator **GARN**. No, that is fine. You go ahead until you are finished.

Senator **PROXMIRE**. In view of the number of witnesses, I will ask that each individual make a very short presentation to the subcommittee so that we may then focus on the period for questioning.

### NEWSPAPER ARTICLES

Senator **GARN**. I have no opening statement. I would ask unanimous consent that several things be placed in the record:

First of all, an article published as part of a CSIS study, my response to a Bill Colby article that recently appeared in the Washington Times, and an article by a staff member of mine, Joe Mayer, on the ABM Treaty that was published in the Washington Times, and a copy of Senate Joint Resolution 74 along with the statement I made in introducing that resolution.

I will not take the time of the committee to make any statement other than placing those things in the record.

[The information follows:]

United States of America

Congressional Record

PROCEEDINGS AND DEBATES OF THE 98th CONGRESS, FIRST SESSION

Vol. 129 WASHINGTON, THURSDAY, MARCH 24, 1983 No. 39—Part II

# Senate

S.J. Res. 74. Joint resolution to express the sense of the Congress that the United States should promote the goal of strategic stability and reduce the risk of nuclear war through a balanced program of force modernization together with negotiations to achieve substantial, verifiable and militarily significant reductions to equal levels on the nuclear arsenals of both superpowers; to the Committee on Foreign Relations.

### LIMITATION OF NUCLEAR ARSENALS

● **Mr. GARN.** Mr. President, upon its return from the Easter recess, the House of Representatives will once again take up for consideration the proposal calling for a neclear freeze. At some time in the near future, the Senate can also be expected to make a statement on the controversial and highly emotional issue of national security and nuclear arms control. I am, therefore, introducing a resolution which calls on the United States to promote the goal of strategic stability, thereby reducing the risk of nuclear war, through a balanced program of arms reduction negotiations and nuclear force modernization.

It is, in my opinion, essential that both elements of negotiations and modernization be integrated into a single, coherent policy. One without the other will not do the job that is necessary. Without a program of force modernization, with particular emphasis on enhancing the survivability of our weapon systems, the United States cannot hope to negotiate meaningful and verifiable arms reduction agreements with the Soviet Union. In the absence of a serious arms control agenda, the United States cannot be expected to sustain the public support to move ahead with needed modernization initiatives.

The resolution I am introducing today incorporates both of these elements necessary to reduce the threat of nuclear war. It does so without eliminating the flexibility the Congress should have in judging specific aspects of the defense budget or curbing the flexibility the President should have in designing the specific terms of his adminstration's arms reduction position at the negotiating table.

This resolution preserves the spirit of Cohen-Nunn "build-down" proposal with its focus on force survivability and periodic modernization joined with the effort to achieve substantial reductions in the nuclear arsenals of both superpowers. In addition, I have drawn from the ideas and principles that were expressed in the various arms control proposals introduced last year by my colleagues in the House and Senate. My resolution does, however, reject categorically a nuclear freeze under current conditions of force imbalance and vulnerability.

Given the importance of the freeze issue to the national debate on nuclear weapons, and more specifically to the upcoming deliberations on this matter by the House, I would like to highlight briefly my principal objections to the freeze. Let me say first, that I raise these objections without any sense of personal animosity toward those who sincerely support the freeze. It is too easy to impugn the motives of those with whom we disagree as a way to avoid rational discussion and debate. I think one of my constituents put it best when she wrote in a letter to me that, "there is a danger of bad-mouthing the other side * * *. Freeze advocates have been accused of being communist dupes, and Peace Through Strength advocates accused of wanting war." Avoiding these recriminations and in the spirit of responsible debate, I would offer the following observations on the merits of the nuclear freeze proposal.

First, a number of editorial and national defense spokesmen not generally allied with the security programs of the Reagan Administration have expressed their concerns with the freeze proposal. For example, the Washington Post recently said that a nuclear freeze "would block new programs designed to take Soviet and American nuclear forces off a hair trigger, to create more 'stability.'" Moreover, "the letter of the (freeze) movement honors mutual negotiated cuts. But its spirit is patently unilateralist * * *." The New York Times added its misgivings about the freeze in the following manner:

> The freeze remains a simplistic, sloganeering response to a complex issue, the political effect (of a nuclear freeze resolution), is to put relatively greater pressure on the U.S. than the Soviet Union, which suppressed its own freeze movements, and a halt in (nuclear) weapons production (as advocated by the freeze proponents) would not be verifiable.

Finally, former Secretary of Defense Harold Brown commented in a like manner about the effects of a freeze:

> A congressional endorsement (of the nuclear freeze) would carry some major risks. Its effect is to put pressure on the U.S., but not on the Soviet Union . . . It would displace or draw attention away from more specific and effective arms control proposals and from actions needed to stabilize the strategic balance.

Second, a freeze at existing force levels would lock the United States and our allies into a position of military disadvantage and vulnerability. Efforts by the United States to deploy a modernized ICBM, be it the MX or a small ICBM, in a survivable basing mode would be blocked under the terms of a freeze. Thus, the destabilizing condition of land-based missile vulnerability which currently prevails will be perpetuated. A freeze would block the deployment of the B-1B and Stealth bombers, needed to replace our aging B-52 force. A freeze would reward the Soviets for unilaterally deploying approximately 350 SS-20 launchers, with 1,050 warheads not counting the refire missile our intelligence agencies credit to each launcher. These mobile missiles threaten our allies in Europe and Asia. A permanent Soviet advantage in long-range theater nuclear systems would be assured.

Third, a nuclear freeze would undermine the negotiating position of the United States at the strategic arms reduction talks (START) and Intermediate Range Nuclear Forces (INF) talks currently underway in Geneva. Under the terms of a freeze, the Soviet Union would have no meaningful incentive to negotiate seriously to reduce its nuclear arsenal. As the British Prime Minister Margaret Thatcher observed, "If you want nuclear weapons reduced in the world you have to take the firm approach."

Fourth, the adoption of a nuclear freeze policy would be a step backward from the progress that has already been made in the START and INF negotiations. Both the United States and the Soviet Union are currently discussing their own versions of proposals which would result in reductions in their nuclear arsenals. While the Soviet proposals, to date, are clearly unacceptable, we should not discourage this discussion of reduction proposals by adopting a nuclear freeze.

Fifth, a freeze on all testing, production and deployment of nuclear weapons would include important elements that cannot be effectively verified by national technical means. Our experience with mounting evidence of Soviet use of outlawed chemical/toxin weapons should give us pause before we entrust our security to any agreement that lacks effective verification procedures and the means of enforcing treaty compliance. The difficulties of verifying a freeze agreement, even with intrusive onsite inspection provisions which the Soviets are likely to find unacceptable, were recognized in the New York Times editorial I referred to earlier.

Sixth, a nuclear freeze would do nothing to hamper Soviet antisubmarine warfare (ASW) or air defense efforts. While neither SALT nor START curb Soviet defensive efforts, the effect on nuclear stability is much less than contemplated under the terms of a freeze since these proposals did not ban all modernization programs. Three-quarters of our strategic nuclear warheads are on missiles, submarines and bombers that are more than 15 years old; three-quarters of the Soviets' are on launchers less than 5 years old. Commonsense will tell you that the combination of age and Soviet defensive measures would seriously weaken the deterrent capability of our forces under a freeze regime.

Finally, the practical effect of a freeze would be to impose unilateral pressure on the United States and our NATO allies to abandon necessary modernization programs. The Soviets heartily applaud nuclear freeze rallies when they are held in New York City; it is an entirely different matter, however, when Soviet citizens attempt to express their views in Moscow. I understand that this criticism of unilateralism offends the advocates of a nuclear freeze. Time and again we are told that the freeze will be mutual, but reality seems to throw some doubts on this assertion. A mutual, verifiable freeze will not be agreed to overnight, and one wonders what will come of our modernization programs in the interim. Will we hedge our bets and support modernization until it is clear that a mutual freeze can be achieved? The record is not promising on this score. As the Washington Post noted:

> To the extent that they have addressed it, freeze advocates tend to say that each new system should be judged on its merits. But it is not easy to find new systems in which they see merit. The letter of the movement honors mutual negotiated cuts. But its spirit is patently unilateralist . . .

A responsible program of negotiated arms reduction and force modernization will bring us closer to the goal of a more stable nuclear environment which is shared by those who support and those who oppose a nuclear freeze. The purpose of introducing this resolution today is to provide the Senate with a vehicle to express its support of such a program. It does not seek to bind the hands of the Congress in making decisions on specific weapon systems, rather it recognizes the merit of prudent modernization programs which enhance the survivability of our nuclear deterrent forces and reduce instability. My resolution also preserves the President's negotiating flexibility while clearly reaffirming the Senate's support for negotiated reductions in the nuclear arsenals of the two superpowers.

Mr. President, I encourage my colleagues to consider the proposal I am making today and join me in sending this urgent message to the American people that we are serious about reducing the threat of nuclear war.●

98th CONGRESS
1st Session

# S. J. RES. 74

To express the sense of the Congress that the United States should promote the goal of strategic stability and reduce the risk of nuclear war through a balanced program of force modernization together with negotiations to achieve substantial, verifiable, and militarily significant reductions to equal levels in the nuclear arsenals of both superpowers.

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IN THE SENATE OF THE UNITED STATES

March 24 (legislative day, March 21), 1983

Mr. Garn introduced the following joint resolution; which was read twice and referred to the Committee on Foreign Relations

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# JOINT RESOLUTION

To express the sense of the Congress that the United States should promote the goal of strategic stability and reduce the risk of nuclear war through a balanced program of force modernization together with negotiations to achieve substantial, verifiable, and militarily significant reductions to equal levels in the nuclear arsenals of both superpowers.

Whereas force survivability is indispensable to stability at the strategic and theater nuclear level;

Whereas strategic stability requires the periodic modernization of vulnerable and aging strategic and theater nuclear weapons with more survivable weapon systems;

Whereas the Soviet nuclear arms buildup, undertaken largely during the time frame of the SALT I and SALT II agreements, threatens the survivability of the United States land-based intercontinental ballistic missile (ICBM) force;

Whereas the current strategic bomber force of the United States will grow increasingly less capable of executing its penetration mission through the decade of the 1980's;

Whereas the unilateral deployment of SS–20 intermediate-range ballistic missiles threatens the security of America's European and Asian allies;

Whereas a nuclear freeze under current conditions would lock into place the vulnerability of key elements of the United States strategic forces, as well as an overall nuclear-force imbalance which would be destabilizing and could increase the likelihood of nuclear war;

Whereas a balanced program of strategic and theater nuclear-force modernization together with sizable and verifiable mutual reductions of Soviet and United States nuclear forces to an equal and substantially reduced level, in keeping with the mandate of the Congress as expressed in Public Law 92–448, would enhance stability and ensure the preservation of peace with liberty; and

Whereas President Reagan has proposed such a balanced program of force modernization and the United States is currently engaged in negotiations with the Soviet Union at the Strategic Arms Reduction Talks (START) and Intermediate-Range Nuclear Force (INF) talks: Now, therefore, be it

*Resolved by the Senate and House of Representatives of the United States of America in Congress assembled,* That in order to promote the goal of strategic stability and reduce the threat of nuclear war, the United States should—

(1) pursue a balanced program of strategic and theater nuclear-force modernization with specific emphasis on increased survivability of nuclear weapon systems;

(2) seek to preserve through force modernization and arms-reduction negotiations the balanced and flexible force capabilities which have historically characterized the United States nuclear deterrent;

(3) continue to pursue negotiated mutual reductions to equal and verifiable levels in the nuclear arsenals of both superpowers, with particular emphasis given to effective measures of verification, including provisions for onsite inspections; and

(4) agree to such reductions only within the bilateral framework of the ongoing START and INF negotiations.

○

# AN AGENDA FOR LEADERSHIP

Report of the Cochairmen
The CSIS Panel on National Security and Arms Control

## PRECIS

**The Senate of the United States will, in the foreseeable future, be required to pass upon the ratification of one or more nuclear armament control and limitations treaties. There is no graver responsibility today than that of reducing the risks of war. It is clear that the United States and the Soviet Union can and should negotiate to achieve very large reductions in the world's nuclear armaments and to reach a dramatically new, lower, and safer threshold of nuclear equality. Higher safety and lower risk still carry a cost, however—a cost that has to be paid in improved military forces across the board, including command and control structures. The United States must, in this process, exploit the powerful new tools for peace provided by advancing technology, new force compositions, nuclear defenses, secure verification, and doctrinal innovations.**

## Introduction

The harsh reality of nuclear weapons, first proven by the devastation of Hiroshima and Nagaski, poses a continuing and fundamental national security challenge for the United States and its allies. The era of America's clear nuclear weapons superiority over the Soviet Union has passed. Indeed, it is questionable how much longer anyone can claim even an approximate parity between the nuclear arsenals of the two superpowers. Our nuclear preeminence at the NATO theater level no longer exists; the allied conventional forces, always at a quantitative disadvantage, now find themselves nearly matched in technological sophistication. It therefore seems timely to reassess our strategic and theater doctrines in both military and political terms as well as in the conventional and nuclear contexts.

Arms control has, to date, proved to be woefully lacking as a contributor to stability in the nuclear age. Past efforts have stumbled over our failures to negotiate agreements to stem the tide of nuclear deployments and to provide for equitable and verifiable force levels The process has been divisive rather than integrative; it has been plagued by internal and international dissension; and the basic political differences between the two societies have permitted the Soviet Union to build up its forces without engendering compensating actions by the United States. Nuclear arms control agreements have reaped more a harvest of distrust than of confidence. Often, they have appeared to be disassociated from the real interests of the United States and its allies—indeed, from the real security interests of all mankind.

An unsuccessful history of negotiations need not be the death knell of arms control as a legitimate instrument of national security. Nuclear weapons and their delivery systems cannot be "uninvented"; we cannot go backward in time to reconstruct a happier present. No magic wand can return us to the prenuclear era or even to the time of our unquestioned military supremacy. In a very fundamental sense we have little choice but to move forward with a responsible, wide-ranging nuclear arms modernization and control agenda.

We cannot ignore the underlying and urgent message that today emanates from everywhere within the Western body politic, whatever the positions that may be preferred on the details of the agenda: effective means must be found to reduce the threat of nuclear war while preserving individual freedom and political independence.

## The Current Political and Military Climate

The political and military environment within which the United States and its allies operate is fraught with pitfalls and challenges. At a time when the United States and its NATO allies are about to embark upon a program of strategic and theater nuclear force modernization, following a decade of self-imposed restraint, political movements dedicated to halting the development and deployment of any nuclear weapons are becoming increasingly vocal. Unlike past movements, these cannot be dismissed as innocent, youthful "leftist" ideology—although the Soviets are making every effort to channel and exploit this antinuclear sentiment. In addition, responsible commentators have urged a reassessment of NATO's strategies on the use of nuclear weapons to deter or repel a conventional attack by the Warsaw Pact. The desire to rid the world of nuclear weapons—to stop the clock, if not to turn it back—is strongly felt by young and old alike. It is also emerging as a moral and political issue within many religious denominations and political parties.

Should the United States respond to the growing worldwide pressures for an immediate nuclear freeze, this would in no way limit continued Soviet advances in nuclear weaponry. An immediate nuclear freeze could easily become a political rationale for denying needed modernization of allied strategic and theater forces. This, in turn, would seriously reduce any leverage we might have during negotiations aimed at an acceptable arms agreement with the Soviets. Thus the real danger of any success of the freeze movement is that it will be limited to the United States and will be counterproductive to its stated objective of reducing the potential for nuclear war. Similarly, any adoption by NATO of a no-first-use nuclear policy, given the imbalance of conventional force, would eliminate one of our principal mechanisms of deterrence and would thus increase nuclear instability and the likelihood of war.

We must stabilize the nuclear balance and strengthen deterrence to war in the face of an opponent whose conventional, chemical, and nuclear arsenals are growing rapidly and show no signs of slowing. During the years in which the United States based its deterrence on the presumed superiority of its weapons technology, the Soviets aggressively expanded the size and quality of their nuclear arsenals. Because we believed that their warheads could not be accurately delivered, we were inattentive to the development of large Soviet missiles and convinced ourselves that we could rely upon a smaller but technologically superior force.

That era of self-delusion and rationalization is over. We can no longer afford to deceive ourselves into believing that the Soviet Union simply responds to the presence of an overwhelming U.S. strategic force. In fact, the evidence is that the Soviets proceed on their own timetables toward their own objectives with little or no recognition of U.S. actions or statements. As a result of that policy, the Soviets now have very powerful land-based missiles that are capable of delivering a great many nuclear weapons rapidly and accurately against military and civilian targets. By contrast with the Soviet's massive buildup of nuclear forces, the United States has exhibited marked restraint in deployment of forces and we witnessed the steady erosion of many elements of our strategic and theater nuclear power.

Of all the legs of our strategic forces, the land-based ICBM is the most vulnerable. The vulnerability of our Minuteman force to a first strike detracts from the goal of crisis stability and weakens the deterrent effect of U.S. strategic forces. The new MX missile—a modern, partial counter to the Soviet SS-18—is intended to provide the United States with a survivable system capable of retaliating against the impressive array of Soviet military forces.

The B-52, the current manned strategic bomber, is a relic of a past era of U.S. military supremacy and is believed by many military analysts to be increasingly incapable of fulfilling its assigned strategic missions. The Reagan administration has reactivated the Carter-cancelled B-1 program, but valuable time has been lost in moving ahead with the necessary modernization of our strategic bomber fleet. The net effect has been to force our continued reliance on the B-52, to work toward an eventual B-1 replacement aircraft, and to try to develop an Advanced Technology Bomber incorporating new technologies that will guarantee its ability to penetrate Soviet air space reliably. We must all recognize that the deployment of a STEALTH strategic bomber force is, at best, still many years in the future.

The sea-based leg of our Triad is today the most survivable element of our deterrence forces. Nonetheless, we face substantial command and control problems with our submarine fleet, and our missiles currently lack the accuracy needed to attack hardened Soviet military targets. The Soviet Typhoon class of submarine launch platform appears to pose a new level of strategic sea-based threat, especially with its missile systems of great accuracy potential. The United States, by deploying the Trident submarine, by developing the D-5 missile with its own high accuracy potentials, and by seeking to exploit cruise missile technologies, is responding both to its innate national security requirements as a global power and to the need to respond to some of the challenges posed by the dynamism of Soviet naval expansion.

The NATO alliance faces a formidable conventional military threat from the Warsaw Pact in armor, artillery, and aircraft—as well as in personnel. Within that same theater, the alliance also faces the fully-operational, long-range, multiple-warhead Soviet SS-20, and its closest U.S. equivalent, the Pershing II, has not yet even been adequately tested. The alliance does have available some 6,000 battlefield tactical nuclear weapons, but many of these are aging and all are growing increasingly vulnerable to Soviet attack. Further, the Soviets have integrated chemical warfare into their military doctrine and deployed forces in a way the alliance has not, and thus they enjoy a significant force advantage in this area against which the West has little or no effective defensive capacity.

Early in the formative years of NATO, the allies recognized that it would prove too costly to match the Warsaw Pact's sizeable—and growing—conventional forces. In the absence of Warsaw Pact tactical or theater nuclear weapons, the NATO alliance buttressed its significantly weaker conventional warfighting apparatus with a selection of battlefield nuclear systems so that any serious conventional assault against NATO would almost automatically trigger a nuclear response against the Pact. That era of clear, battlefield nuclear weapons superiority is now past.

Because the United States—and hence, NATO—has no monopoly on either strategic or theater nuclear weapons or their means of delivery, the policy of relying on nuclear weapons in lieu of seeking parity of conventional forces now means there is serious risk of escalating any conflict to full-scale nuclear war and may suggest that the NATO strategy of limited theater nuclear response to conventional attack is less credible because of concerns about near-inevitable escalation. The problems of escalation control have become increasingly serious as the Soviet buildup of battlefield and theater nuclear systems has progressed. The entire international military equation must be reassessed for the legitimate security interests of all sides and with a view toward new, safer levels of strength and stability.

## Elements of a Stable Arms Reduction Policy

Properly defined and conscientiously pursued, arms control can contribute importantly to the security interests of the United States and its allies. Beyond the merits of any individual agreement that might promote the goals of crisis stability and United States security, the process of negotiations should provide an opportunity to develop fundamental assessments of, and national consensus on, U.S. defense policy. To provide a positive contribution, the arms control process must be guided by an overarching strategic plan that accurately reflects current U.S. strengths and weaknesses, vulnerabilities vis-à-vis the opponent, and future force requirements.

Negotiating reductions to equitable levels in both strategic and theater forces promises to be a difficult task, made especially so by the complex dynamic political and military environment in which such negotiations must take place. The arms control process itself has both intrinsic risks and benefits. As underlined by the U.S. experience with SALT, treaty negotiations can seem to become an ultimate objective in themselves; this has the danger of leading to agreements that would ignore the basic security interests of the nation that such agreements intended to serve. Any effort to question the product of the negotiations is then described as a threat to the more important objective of maintaining the momentum of the negotiating process. If the process and the agreement it produces are allowed to be taken politically as substitutes for necessary force modernization and maintenance, then arms control will lull Americans into a false and dangerous sense of security not warranted by the political and military balance that emerges.

The United States and its allies ought not to surrender the issue of peace to the Soviets who have long recognized the international propaganda advantages of arms control initiatives. This is all the more important in democratic systems where citizens cannot be expected to make the long-term sacrifices necessary for a strong defense if they perceive their governments as pursuing confrontational policies without recognition of the potential for mutually advantageous agreements. Nowhere is the danger of surrendering the peace initiative as obvious as in the case of nuclear weapons.

In his strategic and theater nuclear arms proposals aimed at negotiating deep cuts in the forces of both sides, President Reagan has seized the initiative in seeking to reduce the risks of nuclear confrontation and establish a basis for stable deterrence at reduced weapons levels without jeopardizing legitimate national security interests. If these objectives are to be secured through arms control negotiations, three basic conditions must be met:

> **Each nation's nuclear force must be of sufficient size and quality to deter a nuclear power from attacking that nation with atomic weapons.**
>
> **Each national force must be sufficiently diverse and invulnerable to counterforce attack so that no party to the treaty perceives an advantage in striking first at a time of grave international crisis.**
>
> **Arms limitation agreements, especially those calling for the mutual reduction of nuclear weapons and their delivery systems, must provide for equitable force capability and be effectively verifiable.**

Although reductions in the nuclear arsenals of both the United States and the Soviet Union should be a major negotiating objective, indiscriminate force reductions are unlikely to promote stability or enhance our security. The United States should focus attention on those weapon systems that are the most destabilizing. The Soviet SS-18, SS-19, SS-17, and SS-20 missiles fall into this category. These missile systems, combining as they do large numbers of warheads, massive destructive power, and high degrees of accuracy, pose a serious destabilizing first-strike potential not currently apparent from either U.S. or Soviet sea-based or air-based nuclear weapon systems. Militarily significant reductions of destabilizing weapon systems will ensure the preservation of a survivable retaliatory force with which to maintain deterrence and promote crisis stability.

To achieve militarily significant reductions, the United States will have to move beyond the standard SALT "unit of measure," which limited launch vehicles rather than actual weapon systems. Any new strategic agreement should include reductions of nuclear warheads as well as some other measures of destructive power, such as missile throw-weight or yield. A reduction in warhead numbers alone is inadequate, since not all warheads have equal capabilities. Limitations must be devised that take into account these asymmetries. In fact, the Jackson Amendment to SALT I clearly prohibits the United States from entering into an agreement that would result in U.S. force levels inferior to those of the Soviet Union.

With respect to theater negotiations, Soviet proposals to allow for deployment levels that would accommodate their SS-20 missiles while including British and French forces under a common ceiling for the West are counterproductive to the objectives outlined above. The administration has little room for compromise of its "zero option" proposal—calling for the dismantlement of SS-20, SS-4, and SS-5 missiles in return for no deployments of Pershing II or ground-launched cruise missiles—given an intent to restore equilibrium to the European long-range nuclear force balance. Difficult as this goal may be, it should also be kept in mind that the NATO theater nuclear program addresses only one part of the Soviet force buildup and only one aspect of the threat to NATO's security.

The NATO strategy of flexible response and the overwhelming quantitative superiority of the Warsaw Pact's armored forces will continue to place an important burden on our aging and vulnerable tactical nuclear weapons. In addition, the Soviets are modernizing their tactical nuclear systems with the SS-21 and SS-22. The allies retain the independent flexibility of developing a program that combines increased battlefield targeting options for long-range nuclear forces with the deployment of a smaller but modernized and more efficient battlefield force—particularly exploiting new low-blast, enhanced radiation weapons. There are no ways, however, to reduce the requirement for substantial NATO defense spending increases, rapid deployment of new, more effective conventional weaponry, and improvements in conventional force deployments and tactical doctrine.

## Verification and Enforcement

The bottom line of any arms reduction policy remains that no agreement, even an ostensibly good one, can be considered acceptable or desirable if conformance with its terms cannot be effectively verified. Clearly, no agreement can rely just upon simple trust or declaratory statements of intention. Such reliance would violate three major objectives: to deter one's competitor from violating the provisions of the treaty; to detect violations and provide a mechanism by which violations can be challenged and stopped; and to engender confidence in the arms control process. One of the principal reasons for strong Senate opposition to SALT II was the weakness in the verification provisions.

The demands of ensuring Soviet compliance with any new agreements reducing nuclear warheads, limiting megatonnage, and controlling mobile systems will demand measures of verification that go significantly beyond the limited steps envisaged in SALT I and II. It is almost certain that in some aspects such verification measures will demand continuing cooperation between the United States and USSR. These measures might include a greatly expanded joint data base concerning the numbers and characteristics of each side's weapon systems and even some form of on-site inspection. Soviet willingness to cooperate in designing these verification measures will provide a useful insight into their commitment to genuine arms control.

In reviewing the process by which intelligence data is analyzed, the Senate Select Committee on Intelligence makes the following recommendations:

> Competitive analysis, reflecting a full range of expert points of view, should be conducted periodically on important topics in Soviet strategic weapons developments. The results should be analyzed to provide 'warning signs' and to suggest collection strategies which would minimize the differences and uncertainities.

The United States should pursue this recommendation, extending the mandate to include the formal competitive analysis of intelligence data used in monitoring treaty compliance. As for the intelligence-gathering and decision-making bureaucracy itself, it must be encouraged to raise the flag of caution when warranted; it should not be encouraged, either directly or indirectly by lack of high level commitment to the issue, to paper-over questionable Soviet practices.

To deter violations of an agreement, the potential imposition of sanctions must remain a credible policy tool. It is the certainty that meaningful sanctions will be imposed in the event of violations that gives substance to treaty enforcement. That certainty must combine the demonstrated national political will to act with the vigorous pursuit of compliance issues through such mechanisms as the Standing Consultative Commission. Absent these, even a good treaty properly monitored is insufficient to the national interest.

## Independent Security Factors

Three main points bear directly upon preserving the nation's security in an environment of reduced nuclear armaments, and these are and will remain largely independent of the negotiation process or its results. The United States and NATO have the flexibility and indeed the responsibility to act unilaterally in these areas. Prudence dictates that any nuclear arms reduction policy should include the following elements as internal preconditions: a vigorous national R&D base to protect against "breakout" by the other side and provide a continually expanding set of technological options for ourselves; an integrated management of the reduced but updated nuclear forces to permit their flexible use in any combination of strategic, theater, or tactical hostilities; and provision of an active defense for deterrent forces that can further enhance crisis stability and potentially ameliorate marginal cheating or verification errors.

- Protection against technological surprise is even more critical in an environment of military constraint than in one of expansion. Arms controls reflecting current technologies can be all too easily negated by the development of wholly new technologies or the military application of hitherto unused physical principles.

> Whatever arms agreements are reached, the United States must continue to pursue civilian and military R&D opportunities aggressively. The development and maintenance of a robust R&D establishment will serve two critically important functions: it will provide a buffer against the effects of technological breakout by the other side (whatever they have, we can develop) while assuring ourselves a continually updated set of technological options.
>
> This does not imply that the United States ought to procure every conceivable weapon resulting from new technology; rather, it demands common sense and thus the application of critical judgment while keeping abreast both of new weapons possibilities and of the counters to them. As one example, microminiaturization of computers and other quantum technological leaps now appear to make ballistic missile defense technically practical.

- Available to the alliance is a powerful synergism among its nuclea weapon systems that becomes even more important in an atmospher of overall weapons reductions. United States national security interests in no way require that nuclear parity be achieved by deployin forces that mirror those of opponents. The final choice of weapo systems and tactics must remain one of the United States controls.

> Within the context of a nuclear arms reduction regime, the United States should seek to preserve the complementary nature of a strategic Triad. The inherent synergism that exists within the Triad provides a counterbalance to the weaknesses and vulnerabilities of any individual component. By the same logic, strategic and long-range theater forces can fulfill complementary mis-

> sions; strategic weapons can attack theater targets while long-range theater systems can attack certain strategic targets. Calculations of such weapon interactions, while not devoid of political or military risks, could prove critical in assessing overall force requirements and, if incorporated as strategic doctrine, could provide the alliance a new level of weapons efficiency whether or not treaty negotiations succeed.

- It is becoming ever more clear that alliance nuclear forces, especially if cut back to new low levels through negotiation, must enjoy a new threshold of resilience and flexibility. A critical element in such a modernized robust force is certain to be the provision of active defenses against the most probable form of missile attack.

> A force combining defensive and fighting capabilities could be designed that would be stable under a variety of arms control arrangements, would not be undermined by limited Soviet cheating, and would offer protection against technological surprise. Such a core force must include a rich mixture of bombers, submarines, cruise missiles, less vulnerable ICBMs, better command and control techniques, and an active means of defense against the enemy's most dangerous delivery systems. In addition to reducing the vulnerability of the U.S. ICBM force, active defense systems could offer several additional benefits: they force the opponent to reconfigure his payloads inefficiently; they offer a counter to limited strategic attacks; and they provide a means of protecting our fragile command and control facilities.
>
> Without a substantial defense component, there may be no credible arms control arrangements that could result in deep cuts in each sides' strategic, theater, and battlefield atomic weapons. The possible effects of verification errors and miscalculations at a time of crisis establish the need for a robust mixture of offensive and defensive weapons. Finally, an arms reduction agreement could actually improve the leverage of a ballistic missile defense system, thereby increasing its potential contribution to crisis stability and U.S. security.

## Command, Control, and Disengagement

The structure of arms control policy must extend beyond these several parameters if the United States is to recognize that the "unthinkable" could actually occur. Unless control steps are taken soon, nuclear weapons can be expected to proliferate among many nations and reach political groups and organizations that operate outside of the normal international framework. The nuclear perils that lie ahead are, therefore, not limited to actions of the superpowers: Nuclear war can spread catalytically as the result of a detonation occurring at any trouble spot in the world; it can result from the effort of a rogue state intent upon promoting global carnage; it can occur by accident or as the result of miscalculations at a time of crisis.

The earliest phase of nuclear warfare may not be the commonly accepted spasmodic, massive attack from which there can be no recovery; it may begin with a single isolated event. Were the unthinkable to occur, the nation must have ways to give hundreds of millions of people a second chance. There must be an effective means of saying "stop" to each party involved. The mission of arms control therefore must extend to developing the techniques and apparatus of crisis management, of finding means for warring nuclear powers to disentangle each from the other. Such crisis control techniques might include, among other things, truly invulnerable and innovative means of command, control, and communications; well-thought out rules of disengagement; and even controls on the escalation of hostilities. At least bilaterally agreed-upon methods "to hold our punches" at times of extreme crisis are needed. The concept of the peacetime hot-line is a good one, but it is at best a rudimentary and uncertain tool once tensions begin to rise. What is required is a guaranteed realtime connection between the national command authorities of both sides that could guarantee the opportunity to reach at least a temporary halt in hostilities. Going beyond these communication needs, a complementary system of active defense that could neutralize a limited, initial nuclear attack might prove to be of inestimable worth at a time of crisis by providing a small but invulnerable technical firebreak in the escalation process.

These, among other procedural and technical means of disentanglement or nuclear war termination, could be the practical and substantive products of a new, professional, joint Soviet-U.S. commission charged to seek rational alternatives to linear escalation. Quite possibly it could be in everyone's interest to design and construct—together—a technical system of crisis management that includes active defense and the interconnection of the command structures of all sides.

## RECOMMENDATIONS AND CONCLUSIONS

**We therefore recommend that the policy of the United States afford the highest priority to the development, deployment, and retention of strong, modern, flexible strategic and theater forces—both nuclear and conventional—that deter the initiation of hostilities and reduce the risk of war while providing a positive instrument of national political utility in the freer conduct of the nation's affairs around the world.**

**We recommend that these modernized forces be integrated for maximum efficiency through new command and control constructs that assure accurate response to national decisions, avoid errors of commission and omission, provide for control of escalation, and enhance both their deterrence and utility values.**

**We further recommend that these military and political programs be developed and pursued in consonance with firm, clear, armament agreements negotiated with the USSR aimed at major reductions in the number and power of nuclear weapons, at the achievement of nuclear equality at lower numerical and destructive levels, and at lessening the risk of the utilization of nuclear weapons in war.**

**In making these recommendations in the interest of the United States, its allies, and the citizens of the world, we urge the nation—and particularly the Senate of the United States with its constitutional responsibilities for treaty ratification—to keep the following imperatives in mind as the armament control process moves forward:**

- **There must be strong verification provisions and active compliance monitoring.**
- **There must be effective force equality on both sides without artificial constraints forcing unwarranted systems (i.e., "mirror image") duplication on each side.**
- **There must be a modernization and rejuvenation of both outdated hardware systems and the doctrines for their integration; the United States must avoid being committed to past and future constraints that inherently reduce or limit the deterrent value of U.S. forces, such as policies of "no first use" or prohibitions against active defenses.**

- **There must be a powerful national commitment to U.S. preeminence in science and technology.**
- **There must be a continuing development of national consensus on net U.S. security interests to avoid confusion of negotiation objectives and to ground the treaty process in reality.**

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# "Ronald Reagan: The Great Appeaser?!"

by

Senator Jake Garn

In his article, "Reagan Should Turn From 'Appeasement' to a Freeze," (Washington Post, April 19, 1983) Bill Colby manages to misuse the historical analogy of appeasement, exaggerate the merits of a nuclear freeze, and respond to some basic objections to the freeze in an unconvincing manner.

Mr. Colby begins his analysis with a catchy, but off the mark, reference to the West's policy of appeasement during the 1930s to characterize the Reagan Administration's program for negotiated arms reduction. While advocates of a nuclear freeze have often criticized the President, this is the first time I have heard him called an appeaser. It is an accusation that does not stand up to scrutiny.

Mr. Colby cites the Administration's position at the Strategic Arms Reduction Talks (START) and Intermediate Range Nuclear Force (INF) negotiations as evidence to support his charge of appeasement. He implies that the President's "zero-option" and interim INF agreement proposals which, if accepted by the Soviets, would result in significant reductions in the level of nuclear weapons in Europe, constitute appeasement because he mistakenly believes they move us away from the 1979 NATO decision to deploy Pershing II and Ground Launched Cruise Missiles as a counter to the Soviet SS-20. The fact of the matter is that NATO's policy has consistently been to pursue both missile deployments and arms control negotiations. The Reagan arms reduction proposals are, therefore, eminently reasonable and fully consistent with NATO's "two-track" INF policy.

Mr. Colby finds further signs of appeasement in his unsubstantiated allegation that the President is looking to move away from his original START negotiating position. He claims the President is leaning in favor of the Soviet counter-offer which, although it provides for force reductions (unlike the freeze), does not provide a fair and verifiable basis for agreement. In fact, it has been President Reagan's adherence to the fundamentals of his START proposal -- with its emphasis on verifiable reductions in nuclear weapons -- that has led nuclear freeze advocates to blame him for the lack of progress in arms control and to accuse him of introducing a new Cold War period in U.S.-U.S.S.R. relations. Mr. Colby again mistakes negotiating flexibility with abandonment of basic objectives.

Mr. Colby then adds to the confusion by proposing that the President free himself of his "appeasement" arms reduction policies by taking up leadership of the nuclear freeze movement. One wonders how it is that the adoption of a nuclear freeze, which would lock into place certain critical U.S. strategic force vulnerabilities and reward the Soviets for unilaterally deploying some 360 SS-20 missiles, constitutes anything but the very appeasement Mr. Colby professes to oppose.

Advocates of a nuclear freeze delight in tallying up the various weapon systems whose deployment would be blocked by the adoption of a freeze, and I would share their enthusiasm if nuclear war could be prevented merely by cancelling modernization programs. The list of U.S. systems include: the MX, the Midgetman small ICBM, the B-1, the Stealth bomber, cruise missiles, the Trident II missile, and the Pershing II. This simplistic approach to deterence ignores the reasons and purposes for which these systems have been recommended in the first place. For example, a nuclear freeze would ensure the perpetuation of a destabilizing condition of U.S. ICBM vulnerability to Soviet attack. It would do so without addressing the threat posed by over 600 modern Soviet ICBMs currently deployed -- each with a payload equal to or greater than that of the MX.

Beyond putting a stop to the B-1 and Stealth bomber programs, a freeze would prohibit the deployment of air-launched cruise missiles (ALCMs) on our aging B-52 aircraft. It would do so despite the fact that most responsible analysts recognize the need to enhance the survivability of our B-52 fleet by arming them with ALCMs. This would allow the B-52 to launch its missiles without requiring it to penetrate increasingly sophisticated Soviet air defenses.

The lack of foresight on the part of nuclear freeze advocates, with respect to our sea-based strategic systems, is evident from a review of the recent freeze debate in the House of Representatives. It was not until they were challenged on several very elementary points, such as the need to replace our current submarine force when it reaches the end of its service life (31 of our 32 nuclear missile submarines are 15 to 20 years old and will have to go out of service in the 1990s), that the proponents of a freeze regrouped in order to iron-out the inconsistencies and outright contradictions in their position. A freeze would block the deployment of the Trident II missile and Sea-Launched Cruise Missiles, both of which would enhance the survivability of our sea-based force. Finally, no effective, verifiable limits are placed on Soviet anti-submarine warfare (ASW) developments, thereby further endangering one of the most stabilizing elements of our nuclear deterrent.

Mr. Colby's rebuttal to the objections raised against the freeze is as unconvincing as his defense of its purported merits. With respect to the question of the freeze locking into place a condition of Soviet nuclear superiority, he fails to recognize that the arcane debate over measuring force ratios tends to obsure three more critical considerations. These are:

1. Throughout the 1970s, the relative efforts of the U.S. to modernize its nuclear deterrent as compared to those of the Soviet Union were markedly deficient;
2. U.S. strategic forces are significantly more vulnerable to Soviet attack today than they were a decade ago -- the same is not true of Soviet forces; and,
3. The build-up of Soviet nuclear weapons is intended less for a bolt-out-of-the-blue strike against the U.S., as it is to provide a protective shield under which the Soviets will conduct, directly and by proxy, military aggression, and execute policies of foreign adventurism and political intimidation. Mr. Colby finds this a sign of weakness; one won-

ders if the peoples of Poland and Afghanistan would agree.

Concerning the issue of verification, Mr. Colby seems to take comfort in our ongoing struggle to verify Soviet compliance with SALT II by relying soley upon National Technical Means, such as satellite photography. Again, he has missed a basic point. SALT II limited launchers, while a freeze is far more ambitious in calling for a halt to all testing, production and deployment of nuclear weapons and their delivery systems. The verification challenges of a freeze dwarf the relatively straight-forward, but nonetheless difficult, task of verifying launcher limits. Indeed, in those areas where SALT II attempted to impose more meaningful restrictions, such as limits on the development of a new ICBM or modification of existing missiles, National Technical Means of verification were judged by many in the Congress to be woefully inadequate.

Even provisions for on-site inspection -- something the Soviets are unlikely to accept, as indicated by their recent rejection of such procedures related to nuclear testing limitations -- may not provide an effective means of verifying Soviet compliance with a freeze. An editorial in the New York Times put it accurately when it noted that "a halt in (nuclear) weapons production would not be verifiable." The same holds true for other aspects of a freeze, including nuclear weapons research and development.

One of the many further objections to the freeze which Mr. Colby chose not to address bears on his own theme of demonstrating leadership. What kind of leadership would the President provide to the Western Alliance if he were now to embrace the freeze and, thereby, cut the legs out from under the governments of Western Europe which have worked tirelessly with the United States to pursue a balanced two-track policy of arms control and force modernization as the most responsible way of countering the Soviet SS-20 missile deployments? Is it not significant that no major allied government, all of which are unflinching in their support for arms control, has spoken out in favor of a nuclear freeze?

A freeze is not the answer to our nuclear dilemma, but what is? First, let's recognize that there are no easy answers which are achievable overnight. President Reagan was correct when he recalled the wisdom of H.L. Mencken who said, "For every problem, there's one solution which is simple, neat, and wrong." The Reagan program of arms reduction negotiations and force modernization, the principles of which are embodied in a resolution (S.J.Res. 74) I recently introduced in the Senate, may seem less simple than a freeze or less neat, but it does have the advantage of being the right approach to a difficult problem.

The Soviets can be expected to be nothing less than the toughest of negotiators; they will pocket every unilateral concession and give nothing in return. Our policy should be, and is, based upon perseverance, consistency of purpose and a diligent attention to the details of force balances and verification procedures. Only in this way can arms control play an important role in promoting world peace, enhancing the security of the U.S. and our allies, and reducing the threat of nuclear war. It is a policy that warrants our fullest support.

WASHINGTON TIMES, January 7, 1983

**JOSEPH MAYER**

# Look again at ABM

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Sherlock Holmes once referred to "the curious incident of the dog in the night." "But the dog did nothing in the night," was the reply. "That," said Holmes, "was the curious incident."

The same can be said about the Anti-Ballistic Missile Treaty and the five-year U.S.-Soviet review conference that recently adjourned in Geneva. Is it not curious that at a time when the issue of offensive nuclear arms has drawn so much attention that so little has been said about strategic defense?

Since its ratification in 1972, the ABM treaty has resulted in a deep freeze in the thinking of many defense analysts concerning the merits of strategic defense. What little discussion has taken place has been prompted by the debate over President Reagan's "dense pack" proposal for MX.

The critics of "dense pack" have based their opposition, in part, on its potential reliance on an ABM system for survivability against Soviet attack. An ABM system for MX is said to be too costly, or ineffective. Above all, it is charged that an ABM defense would undermine the 1972 treaty — an agreement which former Secretary of Defense Harold Brown has called "the most important achievement" in arms control.

Advocates of an ABM freeze, much like their counterparts in the offensive-nuclear-freeze movement, fail to account for several fundamental changes in the strategic nuclear relationship between the United States and the Soviet Union since the ratification of the ABM treaty and the Strategic Arms Limitation Treaty (SALT I).

- In 1972, U.S. strategic deterrent forces were relatively invulnerable to Soviet attack; today, their survivablity against a Soviet first strike is a matter of growing concern. This is particularly true with respect to our land-based intercontinental ballistic missile force, thus prompting the difficult search for a survivable MX basing system.
- In 1972, ABM technology was limited, unwieldy and of questionable effectiveness. Today, the potential exists to deploy an effective ABM defense to protect ICBMs and elements of our command, control and communications network.
- Finally, in 1972, the goal of negotiating arms control limits beyond those of Salt I seemed well within our grasp. Today, we must reflect soberly on the abject failure of arms control to impose any meaningful limitations on the massive buildup of Soviet offensive nuclear weapons.

During the negotiations on the ABM treaty, the head of the U.S. delegation, Ambassador Gerard Smith, addressed the relationship between offensive and defensive arms control as follows: "If an agreement providing for more complete strategic offensive arms limitations were not achieved *within five years*, U.S. supreme interests could be jeopardized. Should that occur, it would constitute a basis for withdrawal from the ABM treaty" (emphasis added).

This same principle was endorsed by Congress in approving the AMB treaty. It is thus evident that a thorough review of the ABM treaty is long-overdue and fully consistent with the spirit of the agreement and congressional direction at the time of its ratification.

Proponents of ABM defense are often accused of risking an escalation in the "arms race." If the United States deploys an ABM system, it is said, the Soviets would deploy one, too. Yet, the Soviet Union already has deployed an ABM system around Moscow, as allowed by the treaty, while the U.S. unilaterally dismantled its one ABM site in 1975. The fact is that the doctrine of mutual assured destruction, appropriately referred to as MAD, continues to cloud our thinking on the ABM treaty.

For some, defenselessness against Soviet nuclear attack remains an objective to be protected with greater tenacity than U.S. citizens or our strategic deterrent. This is the kind of reasoning that former Secretary of State Henry Kissinger characterized as "morally questionable even in an era when we had superiority. In an age of strategic equality it would be a formula for mutual suicide."

It is not fully clear that the United States should abandon the ABM treaty at this time. It is not clear the MX deployed in a "dense pack" cluster would rely on ABM for survivability, nor is it clear that an ABM defense of an MX/dense pack system could not be achieved under the terms of the 1972 treaty. It is, however, clear that the United States must reassess the potential contribution of ABM defense to strategic nuclear stability and U.S. security.

Offensive and defensive arms control have been isolated from one another for a decade. During that time, the U.S.-Soviet offensive nuclear relationship has not remained frozen, and neither should our attitude toward the issue of strategic defense and the ABM Treaty.

### U.S./U.S.S.R. BEHAVIOR ON STRATEGIC WEAPONS

Senator **Garn**. If there are no further comments, Mr. Perle, we will ask you to please proceed.

Mr. **Perle**. Thank you very much, Mr. Chairman.

Let me say at the outset that I regret not having a prepared statement available. As I explained to Senator Proxmire a moment ago before the hearing began, I just returned from Europe.

Because the questions that were put in the letter of invitation were about the treaty, not the ordinary questions that normally invite testimony, it seemed to me we would have better discussions if I discussed those questions and did not simply send up a statement.

If I can say a word about the context in which this discussion takes place, it would be that the image of United States and Soviet behavior the last dozen or 15 years with respect to strategic weapons is, in my judgment, a fundamentally wrong one.

It is an image dominated by the sense that the United States and Soviet Union have been piling weapons on to weapons in an endless upward spiral. In fact, if one looks carefully at the acquisition of strategic forces, in the period in which there has been an active arms control negotiation, one finds on the whole a decline in the number of American nuclear weapons deployed worldwide and a significant increase in the number of Soviet weapons deployed worldwide.

### U.S.-REDUCED WARHEAD DEPLOYMENT

I would like to state one figure which is an aggregate figure of the total number of weapons deployed around the world. The United States had one-third more nuclear warheads deployed around the world than it had in the late 1960's than it has now. We have roughly one-quarter of the megatonnage deployed today that we had deployed in the early 1960's.

We have been engaged in the last 15 or 20 years in a process of unilateral cutbacks in nuclear forces. This is not surprising.

In the immediate aftermath of World War II, the development of atomic and hydrogen bombs, and largely in order to limit the scale of the budgets that would have been necessary to obtain a credible defense, particularly with respect to Europe, the United States placed an extraordinary emphasis on nuclear weapons and we developed, perhaps it would be more correct to say we slid almost half consciously into a strategic doctrine that came to be known as massive retaliation, according to which the United States would respond with nuclear weapons to virtually any provocation anywhere in the world. In the period in which that nuclear doctrine was not a very satisfactory one and was ultimately abandoned, dominated our strategic thinking, we built every conceivable type of nuclear weapon in numbers far greater than, on reflection, it now appears that we ever needed.

We have partly as a consequence been engaged in the process of reducing the number of those weapons ever since. I think is a welcome development. It is a development that I think has proceeded safely and that hopefully we will be able to continue in the future.

## INTRODUCTION OF NEW AND MODIFIED SYSTEMS

So, we have seen in recent years a decline in the number of American weapons, while the number of Soviet weapons deployed around the world has risen readily.

If one looks at the introduction of new strategic systems in the last 20 years or so, we find that the United States has introduced some 14 new or modified strategic systems, the Soviets in a comparable period of time some 44 new or modified strategic systems.

The notion that the United States has had an aggressive program of strategic force acquisition while the Soviets have not is simply wrong. Both quantitatively and in terms of levels of investment the Soviet program of strategic acquisition has been far more aggressive than that of the United States.

What is perhaps most disturbing about the trend of these years is that one sees a rather sharp increase on the Soviet side following the 1972 SALT I agreement. Indeed I will submit for the record some charts that reflect this.

If one looks at the scope of the development of new strategic systems on the Soviet side, it picks up rather heavily following 1972 as does the level of the Soviet strategic investment.

Now, having said that, let me say in answer to the fundamental question posed by this hearing, "Can arms control be a useful adjunct to our security policy?", my categoric answer is yes, it can. But it depends on what kind of arms control.

## ARMS CONTROL AGREEMENTS

There are in theory arms control agreements that can enable us to employ our resources more efficiently, to buy more security with those resources, and to avoid competition in areas where competition is neither useful nor stablizing.

There are potentially arms control agreements that can make the strategic balance between the United States and the Soviet Union a more stable one, less dangerous one, and there are potentially arms control agreements that accomplish some of the purposes to which Senator Proxmire referred, that is, reducing uncertainty and enhancing our ability to predict Soviet behavior, but not all arms control agreements possess those properties.

Indeed, I believe that the arms control agreements of the recent past, particularly the SALT I and SALT II treaties, have failed to accomplish those worthwhile purposes.

It is fundamental to the view of this administration that we seek arms control agreements that do indeed accomplish the purposes to which Senator Proxmire referred.

It is especially not easy because any arms control agreement requires obviously that we and the Soviets find an acceptable basis to guide our behavior in the period covered by the treaty.

Our experience in the past with respect to SALT I and SALT II particularly has been that those treaties essentially permitted the Soviets to carry out the strategic programs that on reflection we now believe they had in mind all along.

### LOOSE CONSTRAINTS ON PAST ARMS CONTROL AGREEMENTS

They did not impose terribly severe constraints on the United States either, so we have been largely free in a legal sense to pursue those programs that we desired to pursue under the terms of the SALT I and SALT II Agreements.

The end result of the looseness of the constraints, coupled with an extraordinary number of loopholes, some of which we understood at the time, some of which we came to understand and regret only subsequently, has been to permit a steady, unrelenting growth of strategic forces on the part of the Soviet Union during the whole of the time that their behavior and ours were governed by these arms control agreements.

There is a certain irony in the enthusiasm with which we are urged now to seek an arms control agreement in light of the fact that every strategic weapon which has been built and deployed by the United States since 1972 and every strategic weapon that has been built and deployed by the Soviet Union since 1972 has been built pursuant to an arms control agreement and yet those who are most enthusiastic for arms control as a solution to the security problem are least enthusiastic about the situation in which we find ourselves.

I think the only reflection that makes sense under those circumstances is that the arms control agreements under which we have been living since 1972 have failed to accomplish the purpose that we hoped they would.

I can recall, and I know Senator Proxmire can recall, the debate we had in 1972 over the ratification, over the Senate approval of the SALT I Interim Agreement. You will recall, Senator, that the phrase that was invoked most often by the administration to describe that agreement is that "it halted the momentum of the Soviet strategic buildup."

We now know it did not halt the momentum of the Soviet buildup, that the Soviets, by availing themselves of the freedom that turned out to be inherent in the Treaty that we did not fully appreciate at the time, continued their momentum essentially unimpeded.

We see today the Soviet strategic forces more competent than the forces they had in 1972 when we hoped and in some way believed we were halting the momentum of their buildup.

### CRITERIA IN ARMS CONTROL AGREEMENTS

Arms control can be, in my judgment, a great benefit to the United States and indeed to the world provided it meets certain criteria. Here I think we get to the crux of the problem. It is all too easy in the interest of obtaining an agreement to abandon the fundamental purposes for which one is negotiating.

If I may say so, it is easier for democracies to abandon those fundamental purposes than it is for totalitarian systems because we have a public opinion with which we have to be concerned, we have a press that is often critical, to which we feel bound to respond, and we have elections at regular intervals.

Under the pressure of electoral politics the temptation is to conclude agreements because it is a sign of statesmanship, and because they are regarded as a sign that a more hopeful world, a more stable and peaceful world can be created through the mechanism of bilateral agreement.

The pressure on democratic governments to produce those agreements is far greater than the pressure on our negotiating partners. As a result, we find ourselves virtually at every turn negotiating with the obvious disadvantages of the political asymmetries that apply to us.

## CRITERIA GOVERNING AGREEMENTS

Now, what are the criteria that ought to govern agreements and how can we create a situation in which it is possible for us to negotiate, often under adverse circumstances, without abandoning those essential criteria that create the difference between an arms control agreement that achieves the worldwide purposes that have been referred to this morning and an arms control agreement that is little more than cosmetic, a piece of paper that governs behavior, but governs it so loosely as to permit the very thing that we seek to avoid to continue.

First of all, I believe that the sort of arms control agreement that is desirable to have is one that seriously constrains the quantity of weapons permitted for each side. This principle is embodied in the proposals that President Reagan has made with respect to both the intermediate-range nuclear forces and strategic nuclear forces.

Second, I believe that successful agreements will tend to be simple, far simpler than the agreements we have had in the past. I doubt that there are a dozen people in the United States today who could knowledgeably read and answer questions about the SALT II Agreement. It is so enormously complex.

The relationship between the words contained within the four corners of the agreement and the vast and complex and diffuse negotiating dispute that underlies it is so tenuous that it is impossible to interpret what is and what is not consistent with the terms of that agreement.

It is virtually impossible to predict Soviet behavior pursuant to that agreement. It runs dozens of pages. I submit it is virtually unintelligible to the layman. I have urged anyone who has not read it to attempt to make his way through it.

We can do better than that. I believe we can fashion agreements that are far simpler, that constrain those critical aggregate measures of strategic power, but leave both sides relatively free to pursue the acqusition of strategic forces that suit their own strategic doctrine within the quantitative limits of an overall ceiling on both forces.

We are tending, I believe, in that direction and I think they will develop.

Third, agreements that meet our purposes will permit sufficient flexibility so that we can adapt our strategic forces to changing circumstances.

It has been our experience in the past that we have been unable to correctly anticipate developments on the Soviet side and as a result we have from time to time found ourselves in a situation where we couldn't do things that would have been stabilizing to do because a decade earlier we had made an incorrect judgment about what might prove to be necessary in the future.

I can give examples of that and perhaps when we get into the discussion, if it is a point you wish to pursue, we can do that.

### NEGOTIATING FLEXIBILITY

Some flexibility I think is important, flexibility within overall constraints. It is a little bit like the concept—perhaps the analogy is not totally apt—of the Shakespearean sonnet that is rigid in form, but permits room for tremendous scope with respect to the words and the themes themselves.

I would hope we could negotiate arms control agreements that would place very severe constraints on the quantities on both sides, but would not attempt to define with great precision what developments are and are not permissible because it is precisely in this area that we have discovered that the inevitable ambiguities in the agreement give great license to the Soviet Union and from time to time become a constraint on our own field of action.

Let me say in maintaining the flexibility within the context of an agreement, the purpose of that flexibility from the American point of view is to be able to respond to developments in order to maintain deterrence. Deterrence remains our fundamental purpose.

More often than not it turns out, when one assembles all the evidence available and analyzes it in great detail, that our difficulties are with ambiguities in the agreement rather than with Soviet behavior as such.

The Soviets have proved to be extraordinarily skillful at adapting themselves to opportunities that ambiguities and loopholes in the agreement we have signed have provided.

So, we have seen the Soviets, for example, despite the testimony of the administration at the time that they could not do this, we have seen them replace light missiles with missiles that would be regarded at the time to be heavy with the result that they achieved an enormous increase in their total offensive ballistic missile striking power and they were able to fall back on an ambiguity in the agreement as the basis on which they engaged in that program even though the understanding of the participants involved in the negotiation of that agreement was that no such behavior would be permitted.

So, I think we have to attempt to draft agreements with much greater precision.

This pertains especially to adequate verification procedures and provisions. This administration believes that effective verification is fundamental to the viability of the arms control process and a condition for U.S. agreement to any arms control treaty. Thus, we will not agree to treaties that are loosely worded or that do not provided for effective verification.

### COSMETIC AGREEMENTS

Finally, let me say that we must not in the future content ourselves, as we sometimes have in the past, with agreements that I would call cosmetic in nature. By cosmetic I mean agreements that give the appearance of constraining the growth of strategic forces, but not the reality.

I believe the agreements under which we have been living and continue to perform are largely of that nature. They have not seriously constrained the growth in Soviet strategic forces.

Indeed, we have seen them sustain such growth, but by creating the impression that an arrangement has been achieved between the United States and the Soviet Union that would lead to moderation of the Soviet strategic buildup, I think, if anythin, we have blinded ourselves to the full scope and magnitude of their development.

So, if I may say so, I don't buy the argument that arms control agreements necessarily make Soviet behavior more predictable and more certain. I think in some ways curiously enough the arms control agreements of the past have made Soviet behavior less predictable because they have created a sense of moderation that was not followed by the reality of moderation.

### U.S. UNDERESTIMATION OF SOVIET STRENGTH

That psychological sense of moderation has affected our intelligence estimates. If one looks at the correctness of our 5-year projections during the period in which we have been engaged in an essentially continuous dialog with the Soviet Union, one would find that we have consistently underestimated the growth of the Soviet strategic forces and there have been quite careful studies done that have arrived at this conclusion.

I believe that one of the reasons why our record has been so poor in the intelligence area in anticipating Soviet development is that the psychology of negotiations has tended to lead us to expect moderation where moderation turned out not to be the case.

### TECHNOLOGICAL COMPETITION

If I could make one last point, this has to do with technological competition and with budgetary savings from arms control.

With respect to technological competition, I believe that efforts to restrain technology as such are probably the wrong way to go in stabilizing arms control. In fact much of the technology that we have developed has had the effect of producing a more stable strategic balance.

Innovations with respect to safety, command, and control, and the like on the whole have been helpful to the stability of the strategic balance. I think we need to be very careful, as we negotiate arms control agreements, about attempting to constrain technology.

With respect to budgetary savings, the history of arms control is not a terribly encouraging one. For one thing no arms control agreement is ever so comprehensive as to preclude quite aggressive spending in areas not covered by the agreement and we have seen that on the part of the Soviet Union following some previous agreements.

I will give only one example and then I will stop.

## SALT I AGREEMENT

The United States and its allies today are wrestling in Geneva with the very difficult problem posed for Western security by the massive deployment by the Soviet Union of the SS-20 missile. Yet ironically I believe the SS-20 missile is a product of the SALT I Agreement.

If I can take just a minute, I will explain why I believe that.

## SALT I INTERIM AGREEMENT

In 1972 we entered into the SALT I Interim Agreement and agreed with the Soviets that there would be no further deployment of launchers for ballistic missiles, intercontinental missiles. An intercontinental missile was defined as a missile with a range of 5,500 kilometers or greater.

At the time the Soviets had some 250 launchers for ballistic missiles that fell within that category, a range greater than 5,500 kilometers, targeted on Western Europe.

Under the terms of the SALT I Agreement they were prevented from deploying additional launchers, but they were free to modify existing launchers in order to install in them missiles with far greater capability.

Shortly after the agreement was signed the Soviet Union began to replace those SS-11 missiles targeted on Western Europe with SS-19 missiles targeted on the United States. Every time they replaced an SS-11 with an SS-19 they increased by six times the number of warheads targeted against the United States and they withdrew one warhead targeted against Europe.

Then they faced the question of how to recover the target coverage with respect to Europe and they took a missile that happened to be around at the time called the SS-16, the mobile ICBM with a range greater than 5,500 kilometers and therefore limited under the terms of the agreement.

They removed one stage from this three-stage missile and they called the resulting two-stage missile an SS-20 and they began to deploy it in considerable numbers.

We now face well over a thousand warheads on SS-20's targeted on Europe and Asia and the Middle East, entirely outside the scope of the SALT I Interim Agreement because it has a range of 5,000 kilometers and the cutoff point of the agreement is 5,500 kilometers.

The point of the story is not only that one has to be very careful about how one negotiates an arms control agreement where you create quite perverse results like this one, but it is also to illustrate the point that when one looks at arms control as a means of saving money in terms of defense investment, we have to recognize that no arms control agreement is going to halt Soviet investment in nuclear forces.

Since our own budget is driven largely by the need to maintain deterrence in the face of their programs, it is unlikely that arms control agreements are going to do very much to free us from the burden of providing an adequate investment in strategic forces and indeed if one looks at our investment in strategic forces, it constitutes such a small percentage of the overall defense budget. I really think the prospect for significant budgetary savings lies elsewhere, and in particular with general purpose forces.

If you will forgive me, I think I have spoken long enough, I can say in summary I believe there is an important role for arms control to play, but it has to be done intelligently and it has to be done carefully.

It is very difficult to stand by the fundamental criteria that distinguish a sound agreement from an unsound one when a democracy or collection of democracies is involved in negotiation with a totalitarian state.

We cannot do it successfully without a level of bipartisan support because when the President sends his negotiators to Geneva and when there is division at home about the policy that he is attempting to pursue and the agreement he is hoping to achieve, inevitably it weakens our ability to achieve any agreement.

I think this is dramatically illustrated in the case of the support for a resolution that would freeze forces. For INF, even where that means it would freeze the United States with respect to intermediate nuclear forces at the zero level, it would permit the Soviet Union to retain well over a thousand warheads on their intermediate-range nuclear forces. Thus, a freeze would spell the end of negotiations in Geneva on intermediate-range forces. The same holds true with respect to the ongoing START negotiations for equitable, verifiable, and stable strategic reductions.

I cite that as a dramatic example of how the failure to achieve broad partisan support of the administration's objective can make it very difficult for us to achieve an agreement.

Thank you, Mr. Chairman.

Senator **Stevens**. I apologize for being late. I thank whoever started the hearing. I was on the Floor.

These hearings are being held at the request of Senator Proxmire. I believe they are very much in order.

I have a couple of questions.

### RETIREMENT OF EXISTING U.S. SYSTEMS

First, if we build the MX and the B-1B and complete the Trident, I understand we are committed to retiring the Titan ICBM, the B-52 bombers and Polaris submarines, is that right?

Mr. **Perle**. Yes, our plans call for retiring those forces.

Senator **Stevens**. Are those retirements caused by the existing arms control agreement or our own initiative on replacement?

Mr. **Perle**. The answer, Senator Stevens, is both. We would retire them because they are approaching, and in some cases are well past, obsolescence.

Even if they were not, under the existing framework of arms control agreements to which we remain committed, we would have to stay within some numerical ceilings and that would cause some retirements in any case.

I think the principal reason for retiring those older forces is that they shortly will no longer be able to perform their missions.

### WITHDRAWAL OF EUROPEAN-BASED WEAPONS

Senator **Stevens**. Should we be able to deploy the Pershing and the ground-launched cruise missile, will we be withdrawing any nuclear weapons already stationed in Europe?

Mr. **Perle**. Yes. When the decision was made in December 1979 to deploy 572 modernized intermediate range nuclear missiles, a combination of cruise missiles and Pershing II, it was agreed that for every warhead introduced into Europe under that modernization program a warhead would be withdrawn.

Indeed, Senator Stevens, we went even further than that and at the time of the December 1979 decision we withdraw unilaterally a thousand nuclear warheads that were then stationed in Europe.

So, in connection with the decision to modernize our forces, we made a decision to withdraw 1,572 weapons from Europe if the lack of an arms control agreement led us to deploy all 572 Pershing II and ground-launched cruise missiles. We didn't get much credit for that in the world, I am sorry to say.

One reason is that the Soviets invaded Afghanistan 2 weeks later.

## U.S./U.S.S.R. BALANCE OF THEATER NUCLEAR WEAPONS

Senator **Stevens**. What is the balance of theater nuclear weapons now in Europe between the U.S.S.R. and the United States?

Mr. **Perle**. With respect to intermediate range nuclear forces it is overwhelmingly in the Soviet's favor as one can imagine since we have zero and they have a number that increases every week. They now have some 351 SS–20 missiles deployed. Each has three warheads.

So, it is well over 1,050 warheads. These launchers for SS–20's are capable of being reloaded with additional missiles. Therefore, the number could easily be 2,000 warheads rather than 1,000. The Soviets also have around 250 older SS–4 and SS–5 LEINF missiles targeted on Europe.

With respect to shorter range systems, here it becomes extraordinarily difficult to get an adequate count because counting the number of warheads, number of artillery shells, nuclear artillery shells, is exceedingly difficult. Therefore, we tend to look at the number of artillery tubes that are qualified for nuclear delivery.

But on the whole we believe the West maintains a small and declining advantage in the very short range systems.

With respect to those systems that fall between the very short range and the missiles of intermediate range the Soviets have a significant advantage because they now deploy SS–12/22's, and similar systems in substantial quantities.

So, on the whole the theater nuclear balance which was at one time, say 15 years ago, overwhelmingly favorable to the United States, has now become significantly favorable to the Soviet Union.

## RANGE OF SS–20 MISSILE

Senator **Stevens**. With the deployment of the SS–20's east of the Ural Mountains can those SS–20's now reach my State of Alaska?

Mr. **Perle**. I don't believe all of them can, but I do believe that many of them can.

Senator **Stevens**. Has that made those missiles now ICBM's?

Mr. **Perle**. Senator, when we got into the arms control business in the early seventies we proposed, and the Soviets agreed, that the dividing line between strategic and nonstrategic forces would be 5,500 kilometers.

Senator **STEVENS**. The difference between Murmansk and Maine I understand roughly.

Mr. **PERLE**. That is right. Obviously there are areas of the Soviet Union that are closer to Alaska than that.

Senator **STEVENS**. So that they have the ability to have in their non-ICBM category weapons that actually can threaten our west coast?

Mr. **PERLE**. That is right.

Senator **STEVENS**. Thank you very much.

Senator Proxmire.

### SCOWCROFT COMMISSION REPORT

Senator **PROXMIRE**. Mr. Perle, General Rowney, Chairman of our START delegation, has testified we were able to make a START proposal which called for substantial reductions because that proposal is based on the assumption that MX in a survivable basing mode would be part of our force structure.

He further said, "Lack of survivability is militarily destabilizing." He said a decision to reject dense pack would undercut his negotiating leverage and require a reassessment of our START proposal.

By accepting the Scowcroft Commission report wouldn't the administration be rejecting dense pack and voting for MX in vulnerable silos and therefore wouldn't all of General Rowney's fears come to be?

Was General Rowney wrong or the Congress and administration wrong in supporting the Commission's report?

Mr. **PERLE**. Senator, I believe that we, and I mean all of us in the Department of Defense and elsewhere in the administration and in the Congress, who have been dealing with the question of survivable strategic forces over the last 20 years or so have been slow to make an important adjustment in our thinking.

We became used to a period in which American technology so dominated that of the Soviet Union that we could design and deploy strategic weapon systems that remained invulnerable to attack for a considerable period of time.

So, in the early sixties we deployed ICBM's in hardened silos. We spaced them at such a distance that no Soviet warhead could destroy more than one.

We deployed a force that was beyond the ability of the Soviet Union to destroy because the accuracy of their missiles was such that they could not hope to achieve the combination of yield and accuracy necessary to strike those missiles and destroy them.

Then we began to deploy ballistic missile submarines, Polaris submarines, confident that the Soviets would not be able to locate and destroy them. We were reasonably confident in both cases, the ICBM's and the SLBM's, that we had a 20-year period in which they would not become vulnerable.

The days in which we can count on 20-year invulnerability with respect to strategic weapon systems are gone and we will never see them again.

We now have to content ourselves I believe with the deployment of strategic weapon systems that are all in one degree or another vulnerable to Soviet attack.

In the future for our security we have to count on multiplicity of partial solutions, on an array of strategic forces, any one of which can be attacked and destroyed by the Soviet Union, but all of which taken in combination would place such demands on a Soviet attacker as to give us reasonable confidence that an adequate retaliatory capability would survive an attack.

Senator PROXMIRE. You are saying General Rowney is wrong then, that we can get a START without a survivable basing mode?

Mr. PERLE. I am saying that the Scowcroft Commission recommendation which is to deploy now a limited number of MX's in hardened silos, while working on a small missile that would achieve survivability through a different mechanism, through mobility, gives us the leverage we need in order to achieve an agreement.

## PRESS CRITICISM OF ARMS CONTROL POLICY

Senator PROXMIRE. Last Sunday, Mr. Perle, in the Washington Post, Joseph Kraft made an indictment of the administration's dedication to arms control and basically argued this. "The Reagan administration is top light, not top flight, top light in arms control."

He notes "Shultz and Dam have no arms control experience nor Caspar Weinberger or Thayer."

With regard to you he said you tend to regard arms control as a narcotic dispensed by the Russians with help from the European allies to induce in the United States the kind of somnambulism that marked appeasers when challenged by Hitler.

He also, talking about you, said, "He favors measures of forcing Russian reduction while leaving the country with options to attack."

Are you really an arms control opponent as your critics have charged that it becomes impractical to achieve any resolution of major issues and how do you respond to the Kraft charges?

Mr. PERLE. I can simply say no, but let me say a little bit more than that.

My philosophy of arms control I tried to relate to you this morning. There are arms control agreements that would be enormously helpful to us, but it is hard to achieve them.

Let me say a word about the actual experience in the administration. I don't know who Joe Kraft has in mind as the sort of experienced officials that he thinks would do a better job of achieving agreements that are consistent with the sort of criteria that I have tried to lay out and that would produce the goals that you were describing earlier.

I do know that the experience in the past in arms control has not been entirely satisfying. Those experienced officials who have brought us the agreements in the past have also brought us a situation in which the strategic balance is far more adverse to the United States today and far less stable than it was when they began to negotiate arms control agreements in the late sixties and early seventies.

So, if experience means participation in the agreements of the past, then I think we woud be far better off with people who will bring a fresh perspective and a fresh determination to the process of arms control.

So, I don't buy Joe Kraft with respect to the experience argument.

With respect to my own view, you will notice that none of the things that constitute Joe Kraft's caricature of my views were part of my statement this morning.

Senator PROXMIRE. I noticed in your very clear and forthright criteria you indicated an arms control agreement should leave both sides free to acquire those systems that serve their strategic interests and also sufficient flexibility to adapt.

### CONSTRAINTS ON ARMS AGREEMENTS

Then you went on to say we should make agreements as unambiguous and precise as possible. It seems to me to some extent that squares with what Kraft argues, that you would make the constraints so severe and limit arms control so greatly that it could not really do a comprehensive job.

What is your response to that?

Mr. PERLE. Obviously it is in the eye of the beholder, but I think if we don't achieve agreements that have a generally constraining force, then we have not achieved very much. I honestly don't know what Kraft would regard as a good arms control agreement.

He applauded SALT I and SALT II. Yet he is as vociferous as anyone in lamenting the current strategic situation, a strategic situation that reflects adherence to SALT I and SALT II.

Somehow he has failed to evolve historically along the lines that I think are obvious if one looks at the situation. You can't have been as enthusiastic as Joe was for SALT I and SALT II and as unenthusiastic as Joe is with the current situation without realizing there is a very large contradiction.

I want to see arms control agreements that accomplish our purpose. It is all too easy to abandon those purposes and sign a piece of paper for the sake of having a signing ceremony with the heads of state drinking champagne, without a real result. That has been characteristic of the agreements in the past.

Senator PROXIMIRE. I get the feeling that you certainly have a very practical and extremely limited view of arms control as I see it. Maybe I am unfair. You feel that it is of some use, but the use is really pretty marginal and pretty limited and really very modest.

Mr. PERLE. I think it potentially has very considerable use if we have the will and the resolve to negotiate the kinds of agreements that meet the quite ambitious objectives that I think we would share.

The problem is that we have tended as negotiations wore on to lower our sights in order to achieve an agreement because the Soviets have not been terribly accommodating, to put it mildly.

With respect to Joe Kraft's reference to appeasement, I have on several occasions cited, and let me cite again, a reflection by Sir

Samuel Hoare, the British official in the thirties who participated among other things in negotiations at Munich.

I cite him because it seems to me he put very well the essential dynamics of the negotiation in which he said that as the Munich negotiations wore on and the British became increasingly concerned that they should not fail, they made concessions and, as he puts it, one concession led to another and in the end he began to ask himself whether the substance had not been sacrificed to the negotiation.

Now that is, if you will, a kind of diplomatic appeasement which is all too easy to slide into in which one abandons the objective in order to get agreement.

The difference between Joe Kraft and me is that I think we ought to persist in negotiating agreements that accomplish our objective and not settle for what may in some cases he the only kind of agreement the Soviets are prepared to give us and that is one that does not accomplish our objective.

### PERMANENT ADVISORY BOARD IN ARMS CONTROL

Senator **Proxmire**. Do you support the appointment of a permanent advisory body in arms control as suggested by Senator Jackson and others?

Mr. **Perle**. Arms control has become, I am sorry to say, a deeply partisan issue in recent weeks.

Should the President support such a proposal, it would be an act of generosity and, of course, it must be implemented in a thoughtful and balanced manner.

Senator **Proxmire**. We have other questions, Mr. Chairman, for the record.

Senator **Stevens**. Senator Garn.

Senator **Garn**. Thank you, Mr. Chairman.

### TREATY FOR TREATY'S SAKE NOT SERVING U.S. NEEDS

Secretary Perle, you are much more patient than I am because I would ask the first question, Who is Joe Kraft?

I am just absolutely amazed at these wonderful wizards of the press who talk about experience, who have none whatsoever, except to be a critic. It reminds me very much back in my flying days when you could always get a check pilot who could sit over there and criticize everything you were doing. He could not fly himself, but he was a good critic.

So, they sit here and talk about people's resolve. Anybody can get an arms control agreement if you just agree to what the Soviets want. That is easy. Paul Warnke could get us another one just as bad as SALT II probably relatively quickly.

What is being said is the administration has no resolve, run over there and get a treaty for a treaty's sake. What you have said is largely ignored. I don't know of any issue that I have ever had more frustration with in my entire public career.

I can understand differences in social policy, disagreement, fine, honest differences of opinion. But to make defense and arms control partisan issues disgusts me because it threatens my children, it threatens how they are going to live, it threatens the security of this country.

So, I am absolutely startled by the debate that goes on, by people not only in the press, but by my colleagues who have not even bothered to read the short forms of SALT I and SALT II, let alone the negotiations you talk about.

I have in recent years done a great deal of study concerning the subject of arms control, and it is very complicated and very complex. Anybody who is willing to take out the political rhetoric of these issues and just study the facts would have to come up with certain conclusions.

They may still disagree and say we don't need an MX or this or whatever. But to indicate that there is no resolve or no intent on the part of this administration to have an arms control treaty is ridiculous, to say the least.

It is a matter of whether you have an administration that wants a realistic arms control treaty that really places some constraints on the arms race, which I would think all of those who yell so much would like.

### ARMS RACE COVERAGE BY NEWS MEDIA

What you have said in your testimony today is largely ignored. All you read about in the press is massive buildup. They can't write an article in any of the newspapers without putting in the words "huge," "large," "incredible." Every story is virtually an editorial. If they want to label a column an editorial, so be it.

Any writer or electronic medium can say anything they want as long as they label it as their opinion. What frustrates me is the constant editorializing in news stories over and over again.

Then we hear there are polls conducted, the American people want less arms and they want a freeze and all of this. Of course they do.

When the Chinese water treatment goes on night after night after night on network news, night after night it goes on and you tell people there is a massive arms buildup going on, we are the only ones in the arms race, we are causing it, we ought to have a nuclear freeze, what else are you going to get from a poll?

What if they printed the truth every night, the facts you stated, and I want to highlight those, one-third fewer nuclear warheads in the U.S. arsenal than in the 1960s. How many times do we hear this? A unilateral reduction of 8,000 warheads while the Soviet Union has added thousands during the same period of time.

If you told that every night, then what results would you get from a poll? One-fourth the megatonnage since 1960, how often is that printed or related—I haven't seen it yet, I haven't seen either figure in one story or one column—while the Soviet Union has increased their megatonnage.

In 1970 what did we have—1,054 ICBM's, 54 Titans, now 52, 550 Minuteman III's, 450 Minuteman II's. What do we have today? The same thing.

The Soviets had approximately 600 launchers at that time. Now they have approximately 1400. There has been an arms race going on. We just have not been participating in it. It has been a one-sided arms race.

How many times do you hear the statistics that in 1962, John Kennedy's last budget, 46 to 48 percent of his total budget to run of $106 billion was for the military. But if Ronald Reagan got every dime he asked for, as some of us support, we would go to 29 percent of the total budget.

Buildup? Hogwash. Replacement and modernization. You correctly outlined what happened under SALT I—the biggest arms buildup in the history of this world legally under the terms of SALT I. Whether they cheated or not, that is a fact.

The major reason I opposed SALT II—I am supposed to be some sort of superhawk that wants war. I really do with seven children, the oldest 25 and the youngest 10 months. I am really looking for one, that is what I really want. You are a little bit tired of that, too.

You question people's sincerity, whether they want a war or not or whether we are serious about arms control. SALT II is the biggest fraud ever perpetrated on the American people because of that false sense of security that you talked about.

People didn't realize that it counted launchers, not warheads. A launcher is a hole in the ground. It is a tube on a submarine, an airplane. It is not a weapon. Launchers don't kill people; warheads kill people.

So, the big thing in all those debates by Warnke and others in 1979 is that we got a 10-percent reduction from 2,250 total warheads. Correct, big deal.

So, they wiped out 250 launchers, single warhead launchers, eliminated 250 warheads. Then they will have 1,320 MIRVed systems, including 820 land-based intercontinental ballistic missiles for which the treaty allowed a maximum of 10 warheads in more than one-third of those launchers.

That is why I opposed it because the Soviets had about 500 at the time. You give them 820. That is an increase of 320 launchers with approximately 10 warheads on each. That is an increase of 3,200 warheads. With a reduction of 250, a net gain of almost 3,000 warheads. And we say that is arms control and reduction?

The only reason I opposed SALT II was that it was a big massive increase in arms on both sides and it didn't make any sense whatsoever to allow that. I wish there were some way to get the facts printed and then allow people to make up their own minds about what we are doing.

I think the Scowcroft Commission made an incredibly important statement that has been largely ignored. They said that our arms control strategy ought to count warheads. That has been my position the entire time I have been here.

We ought to try to limit the number of nuclear warheads. Launcher limits are primarily responsible for MIRVed systems. If we limit launchers as we did in previous arms control treaties, then what does technology do? We put more warheads on each launcher.

So, we have actually as a result of those treaties probably got a lot more nuclear warheads today than if we had had no treaties whatsoever.

### ARMS CONTROL RECORD

If you look at the history of arms control back to the sea battles, the naval treaties, they are all the same. You limit something and unless it is a comprehensive realistic treaty that actually calls for a verifiable reduction, you break out someplace else over and over again with new technology.

I wish we could get together on a few basic principles that it is important first of all in an arms control treaty to count warheads and then it is important to have the number of those warheads reduced. That is the only way, the only possible way to provide genuine arms control.

During the debate on SALT II, I offered an alternative, interestingly enough to all the critics, many of whom are here today, about what I wanted. They never bothered to look. The treaty I offered as a substitute called for reductions well below the level of the numbers in SALT II.

I just wish there were some way to get the facts out of what has taken place over the last 20 years.

You did not get a question, but I used my time to make a speech and to try to bring out some of these facts that you related in your opening statement that simply are not recognized.

I can't tell you how much I would like to see a realistic verifiable arms reduction treaty. I know that the President shares that view.

Another treaty that legalizes an arms race encourages further destabilization, a treaty for treaty's sake of that kind is not worth it. I would rather have none. We would be safer and more secure with none than the kind we have negotiated in the past.

Thank you, Mr. Chairman.

Senator **STEVENS**. Senator Andrews.

Senator **ANDREWS**. Mr. Secretary, following the comments of my colleague, let me ask a couple of questions so that we can probably be a little better educated that we are.

### MX AND MIDGETMAN PRODUCTION

There is a good deal of concern that production of the MX and Midgetman, as brought out by the Scowcroft Commission's report, would violate SALT II in such areas as flight testing, reloadable launchers, silo modification for hardening.

Is that true?

Mr. **PERLE**. No, it is not, Senator Andrews.

First, we are talking about deployment that would take place after 1985 at which point the existing SALT II agreement would have expired, if it ever had been ratified which, of course, it has not.

Senator **ANDREWS**. You are saying the reason it will not violate SALT II is SALT II would have expired before the time that these systems would go into effect?

Mr. **PERLE**. Actually deployed. We could, if you desire, go through each of those areas separately and look at whether the deployment would violate those even if the treaty were in effect. It seems to me quite enough to say that the deployment would take place after the expiration of the treaty.

Senator **Andrews**: So, in essence the Commission report as delivered to Congress naturally assumes that we are not flying under SALT II and the limitations, such as they were, imposed by SALT II?

Mr. **Perle**. I would think one would infer that from the Committee report because of the expiration date.

Senator **Andrews**. Given your experience in arms control and given the concept that my colleague and good friend from Utah brought forth, do you think there would be any way or any expectation of success in negotiating an arms control agreement now, call it SALT II and a half or SALT III or whatnot, with the Soviets that limited warheads and spoke to warheads instead of speaking to launchers?

Mr. **Perle**. Yes, I believe it is indeed possible, but——

Senator **Andrews**. Are we proposing that?

### LIMITATION ON WARHEADS AND LAUNCHERS

Mr. **Perle**. We have from the very beginning in our START proposals and in our proposals with respect to intermediate-range forces sought to achieve a limit on warheads.

We have also had as part of our START proposal a limit on the number of launchers. The Scowcroft Commission has suggested that the limit on the number of launchers, which is a part of our present START proposals, is unnecessary and should be lifted.

But we have always sought to achieve limitations on the number of warheads.

Senator **Andrews**. That is one of our key proposals right now?

Mr. **Perle**. Indeed it is.

Senator **Andrews**. In START and it would be if we deep-sixed START and moved on to doing something in the field of another SALT proposal?

Mr. **Perle**. It seems to me that one could respond to the Scowcroft Commission's report by some modifications to our existing proposal without abandoning that proposal in its entirety. In fact, there are substantial parallels. I think the Commission makes that obervation.

Senator **Andrews**. Since this is the Appropriations Committee rather than the authorizing committee and we are dealing with dollars largely and are concerned about whether those dollars are wisely spent, sometime ago we had an ABM system and we spent some $4 ½ billion to build the ABM system only to shut it down within 30 days because it was determined not to be, as I understand, cost effective since it was limited to 100 defensive missiles and cost the Soviets far less to put 100 missiles aimed at those and, therefore, we lost cost effectiveness and we shut it down.

Now, in testimony that the same Appropriations Committee has heard we are told that MX deployed in 100 Minuteman silos are, in essence, a bargaining chip that we need and that by deploying them there in some temporary mode, we will be able to get a better agreement at the conference table than if we do not deploy them.

Is it our feeling this is one of the important reasons for deploying an MX in these Minuteman silos?

Mr. **Perle**. I would not characterize it as a bargaining chip because that conveys a sense of something that one throws on the table.

Senator **Andrews**. The administration characterized it as a bargaining chip.

Mr. **Perle**. I wouldn't. I would say without a clear indication from the Soviet Union that we mean to remedy the imbalance that has been permitted to develop, we won't achieve any kind of agreement. That is not quite the same as saying that the MX is going into the post as a bargaining chip.

### COST-EFFECTIVENESS OF MISSILE SYSTEMS

Senator **Andrews**. To go back to the cost-effectiveness question I raised, sometime ago the ABM we discontinued beause it simply was not cost effective. If at the present time we have Minuteman III missiles in those silos and we have in those 100 silos that are now targeted by the Soviets, we have been told by this administration and the last administration, some 300 warheads, we now propose to put 1,000 warheads in those same number of silos, in essence we have given the Soviets three and a third times as many warheads to hold hostage for the same number of their missiles coming in to us.

Doesn't that place cost effectiveness in their favor again?

Mr. **Perle**. The deployment of the MX and the substitution of the 1,000 warheads——

Senator **Andrews**. In essence we are putting 1,000 warheads where 300 are under the Soviet guns right now. We are giving them three and a third times more bang for their buck.

Mr. **Perle**. We are also giving ourselves a significant increase in capability.

### VULNERABILITY OF NEW U.S. MISSILE SYSTEMS

Senator **Andrews**. If you measure capability as being under the gun, being capable of being wiped out in a premptive first strike, doesn't that move us that much closer to the hair-trigger reaction, that we have to launch on warning because if we don't, our biggest, our newest, our most accurate missiles are going to be chewed up by their first stike?

Mr. **Perle**. I don't believe we are moving closer to a policy of launch on warning. I would certainly hope that we would not. I share the point that I think you are making, that there is a residual vulnerability in the fixed land-based ICBM's that is a cause of concern to us.

This is why we have been trying very hard to find a method of basing the MX that would be an improvement over the situation we find ourselves in without it.

There will be some additional hardening and we see this deployment followed, along the lines of the Scowcroft Commission recommendation, by a mobile system that would achieve a measure of survivability by other means, by mobility.

It is not a perfect solution. I wouldn't presume to suggest that it is, but there are no longer any perfect solutions, Senator. I wish there were. I wish we could return to the days when we could deploy something and it would be invulnerable for a reasonable period of time.

What we have to live with now are vulnerabilities, crosscutting vulnerabilities. But when you look at the force as a whole, at the many different challenges it presents to a Soviet attacker, then I think the mutually reinforcing elements of our deterrence gives us an adequate basis for believing that we can achieve stability.

I am afraid that is the best we are going to be able to do. If we insist on perfect invulnerability, then there is going to be no weapons system that is cost effective when deployed.

### BASING SYSTEM FOR MX

Senator **Andrews**. You are tending to agree it looks as though in this new weapon system, MX, we are getting in a little situation where a person bought a Rolls Royce and didn't have a garage to put it in. We have yet to find that garage, that basing system that justifies the cost of the new weapon system.

That has to do with cost effectiveness. That is my concern and the concern of some of my colleagues on this Committee.

Thank you, Mr. Chairman.

Senator **Stevens**. Senator Proxmire, do you have further questions?

Senator **Proxmire**. Yes.

### PERMANENT NEGOTIATING COMMISSION

Senator **Stevens**. Mr. Perle, in answer to my good friend, Joe Kraft, if he had written his articles back at the time when Ed Muskie was Secretary and Dr. Brown was Secretary of Defense and Admiral Turner was over at CIA, I would have to make the same comment, none of them had any track record in arms control negotiations. Is that right?

Mr. **Perle**. I believe that is correct.

Senator **Stevens**. I think there is a growing feeling here on the Hill that we should look toward a permanent commission, some kind of bipartisan structure that would survive from one administration to the other to have that track record develop.

I am hopeful we might have some favorable consideration of that proposal from the administration.

Mr. **Perle**. Senator, if I could just make one observation, it is not this question of what quality it takes. It bears on the matter of experience to achieve success in arms control negotiations.

I must say that I believe the quality that is more important than all the others put together is the will and resolve of a President in power, supported by the Congress, to insist upon an agreement that meets our fundamental security criteria.

It is fundamentally a political quality that has a great deal to do with political courage, if I may say so. The problem is not finding people who are experienced in the details of weapon systems. The Government abunds in experts who know about weapon systems and who know about the technicalities of arms control.

What is difficult is creating the political situation in which agreement can be achieved. That I believe requires both a determination to insist on a sound agreement and not settle for an unsound one and an ability to martial the resources of the Nation behind that effort, and among the critical elements of that martialing of resources is a defense program that gives the Soviet Union an incentive for arriving at an agreement that is stabilizing.

I think the President has attempted to put such a program into place. With the help of this committee and others, I am confident we will have such a program and the rest becomes largely a matter of political will.

I must say I don't agree that what is lacking is a kind of expertise that I think is of a second order of importance. What is fundamentally important is political leadership and that is relegated by our system to the President and to the leaders in the Congress.

Senator **Stevens**. Thank you very much. We appreciate your time, Mr. Secretary.

### MX DEPLOYMENT

Senator **Garn**. Mr. Chairman, could I make a brief comment in response to Senator Andrews' questions about the 100 MX?

I think it is agreed by most experts that the number of 100 would not be considered first strike. It eliminates that possibility because you would not be foolish enough to launch a first strike with that few weapons.

Second, even though there is some vulnerability, there has never been a weapon system of any kind that has been totally invulnerable, from bows and arrows to the present. There never will be.

Whatever level of destruction you accept, if you pick 80 percent, the difference is if you get 20 MX's left rather than 20 Minutemen, that is 140 more warheads, much more accurate warheads.

It is a marginal improvement, there is no doubt about it, but it is an improvement in the number of survivable warheads out of those launchers and the capability of that warhead that I should think would give the Soviets some pause for additional deterrence to think, well, there will be 140 more capable warheads coming at us if we strike.

I do think, Senator Andrews, you have to look at that possibility, that whatever the vulnerability of the Minutemen is in percentage, the MX has the same one based in the same silos, but you have more capability remaining because of having deployed that MX.

Senator **Andrews**. Except in this business of cost effectiveness if there are indeed ten warheads in each one of these holes that previously held three, you add that much more incentive to the Soviets to not take out just 80 percent, but to try to take out all 100 percent because it is far more cost effective for them to add, say, an extra missile.

They now have two missiles targeted per silo to take out three warheads. That is cost effective for them. Our administration and the administration prior to that said that is the reason we had to move from the Minuteman to the MX, if I remember what was said, and because those missiles were in fact vulnerable, we were told we had to move them.

Now, if we give them ten warheads, they can target three against each one of those silos, the cost effectiveness is way high for ten against three.

Senator **STEVENS**. Gentlemen, we have other witnesses.

Thank you very much.

Mr. **PERLE**. Mr. Chairman, could I make one last remark?

Senator **STEVENS**. Yes, if you promise not to spark my colleagues.

### ADMINISTRATION SINCERITY ON ARMS CONTROL ISSUE

Mr. **PERLE**. This is on quite another matter. I don't think I fully responded to Senator Proxmire's question reflecting the Joseph Kraft article on one issue and that is the question of sincerity of the administration with respect to arms control.

I don't know how one measures sincerity in negotiating in particular in the sort of difficult negotiating situation in which we now find ourselves.

This administration came into office January 20, 1981, and one of the first decisions it made was that it would honor the NATO December 1979 decision to negotiate limits on intermediate-range nuclear forces.

In May then Secretary of State Haig announced that we would begin negotiations by the end of the year.

In November of that year the President announced his proposal to eliminate entirely that category of weapons, which was a far-reaching proposal, one that prior to that time had been urged on the United States by Helmut Schmidt and by the Dutch Prime Minister and others and it was hailed at the time as an innovative and far-reaching arms control proposal, which it was.

If one were to judge sincerity by the rapidity with which we abandon our objectives, then I think the test of sincerity becomes a source of pressure on this, on any other administration, that is not intended by those people who have been questioning the sincerity of the administration.

We are attempting to negotiate in circumstances in the INF talks, for example, where the Soviets already have 1,050 warheads and we have none and we have been trying to hold together an allied coalition to move toward that deployment while negotiating.

I don't know how one judges sincerity in those circumstances. Let me only say that we are doing everything we can to bring about agreements consistent with the sort of criteria that I was suggesting earlier, agreements that are stabilizing, that have significant quantitative constraints, that are precise and provide for effective verification procedures, that permit the kind of flexibility we and the Soviets both require to respond to deficiencies in our strategic forces and that on the whole can lead in the long run to vastly reduced arsenals on both sides.

To question the sincerity under those circumstances simply by looking at the speed at which we make concessions without looking at how successful we have been in eliciting comparable concessions from the other side I think is a great disservice to this or, as I say, any other administration.

We will go on doing the best we can, but don't ask us to demonstrate sincerity by rushing to get a quick agreement that we believe, and I think Congress believes, is not in our national interests.

Thank you very much, Mr. Chairman.

Senator **Stevens**. Thank you very much.

### SUBMITTED QUESTIONS

There are additional questions which some members have submitted. They will be inserted, together with your response, at this point.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

# ADDITIONAL COMMITTEE QUESTIONS

## NON-STRATEGIC NUCLEAR BALANCE

QUESTION: What is the total balance of theater nuclear weapons between the US and USSR in Europe, if we include air-deliverable weapons, nuclear artillery, etc? Do the Soviets have the lead?

ANSWER: By whatever counting rules used, the Soviet Union enjoys a considerable and growing advantage in the field of non-strategic nuclear weapons. The only category in which the US and NATO have a slim lead is in short-range nuclear missiles and artillery and the Soviets are steadily closing the gap. For example, NATO's force comparison paper, published in 1982, and using very conservative counting rules which favor the Soviet Union, shows the Soviet Union/Warsaw Pact having over 1200 warheads on approximately 600 longer-range INF missiles to none for the US/NATO, 650 Soviet/ Warsaw Pact shorter-range INF missiles to 180 for the US/NATO and 2500 Soviet/Warsaw Pact aircraft in a nuclear role compared to 800 for the US/NATO. In the category of short-range nuclear forces (SNF) which includes artillery and short-range missiles, US/NATO enjoys a slim 1100 to 950 advantage but the Soviets have an overwhelming lead in short-range missiles and are steadily increasing the number of their nuclear capable artillery systems. If all nuclear capable systems are counted, not just those in operational units which may have a nuclear role, the Soviet advantage is much greater.

## SS-20/Pershing II Missile Count

QUESTION: Do the Intermediate-Range Nuclear Force negoatiations cover the issue of stockpiled missiles available for refire?

ANSWER: [Deleted] the President's interim INF proposal for equal levels of warheads on US and Soviet longer-range, land-based INF missiles [deleted].

QUESTION: Do the Soviets have additional SS-20 missiles nearby their SS-20 launchers which would give them a refire capability?

ANSWER: It is estimated that the Soviets have about one refire for each operational launcher [deleted].

QUESTION: Are we planning to have extra PERSHING IIs stockpiled in Europe for a potential refire capability?

ANSWER: [Deleted.]

QUESTION: What kind of verification difficulties are posed by the stockpiling of extra missiles?

ANSWER: The major concerns which we would have would be whether all facilities for stockpiling missiles were declared and whether it were possible to determine the number of missiles actually stored in those facilities.

## INF Negotiations

QUESTION: The President has proposed that an interim agreement limiting the number of intermediate-range nuclear forces to equal levels be negotiated as a first step toward achievement of the "zero option" in Europe. What number would the Administration be willing to accept in an interim agreement?

ANSWER: Under the President's interim INF proposal, the US would accept equal US-Soviet limits at some finite number of warheads on launchers below our planned deployment level of 572 warheads on launchers. Leaving the number as an issue for negotiation allows the greatest possible flexibility. The Soviets have not been willing to accept zero/zero; we are now asking what equal level they will accept.

QUESTION: How would this affect our PERSHING II deployment plans?

ANSWER: We believe that any alternative level agreed under the interim proposal should preserve both the GLCM and PERSHING II as elements of our force, although at reduced levels.

QUESTION: Can we expect the Soviets to draw down on their SS-20 deployments without some decrease in the projected U.S. PERSHING II deployment?

ANSWER: We are perfectly willing to decrease planned PII as well as GLCM deployment levels in exchange for SS-20 reductions. That is the essence of the US interim proposal as well as our zero-zero proposal.

## NEW SOVIET ICBMs

QUESTION: How many ICBMs are the Soviets now flight testing?
ANSWER: The Soviets are flight testing two new ICBMs. One, the SS-X-24, they have identified as the one new ICBM permitted under SALT II. [Deleted.]

QUESTION: Are the Soviets encrypting the telemetry from these flight tests missiles?
ANSWER: The Soviets are heavily encrypting the telemetry from these flight tests.

QUESTION: What percentage of the telemetry is being encrypted?
ANSWER: The Soviets are encrypting from [deleted] of the data.

## ABM TREATY

Question: Does the 1972 ABM Treaty specifically prohibit deployment of space weapons for ballistic missile defense?

Answer: Article V of the ABM Treaty expressly prohibits development, testing and deployment of space-based ABM systems or components. However, research on such systems or components up to, but not including, the field-testing stage is permitted.

QUESTION: Under the 1967 Outer Space Treaty, could space laser weapons be construed to be "weapons of mass destruction" prohibited by the treaty?

ANSWER: No, the words "weapons of mass destruction" were defined by the UN in 1948 to include nuclear weapons, radiological weapons, lethal chemical and biological weapons, and others with the destructive effect of nuclear weapons. Laser weapons, by virtue of their precision, are clearly not in this category.

Question: How does the President's space defense initiatives affect START negotiations assuming we also go ahead with the M-X?

Answer: The President has committed the US to investigating emerging technologies to see what potential they may have for defense against ballistic missiles. Development of this technology may take 10 to 20 years or more. In the interim we must ensure that a stable strategic balance is restored and maintained at reduced force levels. The modernization of our strategic forces, of which M-X is an important element, and our arms control intiatives will achieve these goals. We believe the President's initiative will reinforce our current START negotiations which are concentrating on reducing currently deployed systems and on channeling near-term modernization into more stabilizing systems. It will also do so by maintaining the prospect that in the future the effectiveness of ballistic missile systems will be greatly reduced.

## MX/BMD

Question: Should the US decide in the future that it is necessary to provide an active ABM defense for its land-based ICBMs, would that require a renegotiation or abrogation of the ABM Treaty?

Answer: Under the terms of the ABM Treaty and Protocol, the US has the right to deploy an ABM system of up to 100 interceptor launchers and missiles for the protection of one ICBM launcher deployment area. The ABM system would be subject to the limitations set forth in Article III of the Treaty. A larger ABM deployment would require amendments to the current treaty.

Question: At one time we briefly deployed an ABM system at Grand Forks, N.D. Could the US decide to change the location of the one ABM system permitted under the treaty without precipitating a renegotiation of the treaty?

Answer: The question of dismantling at its present location the one permitted system for the defense of ICBM silo launchers and subsequent deployment of the permitted system at a different location apparently did not arise during the negotiations which led to the Treaty. The US is of the view that the ABM Treaty--including Common Understanding A, in which the US noted that its ABM systems deployment area for defense of ICBM silo launchers will be centered in the Grand Forks ICBM silo launcher deployment area--does not require the US to locate its permitted deployment of an ABM system for defense of ICBMs permanently at

Grand Forks. This Common Understanding was clearly only a statement of US intention at the time and not a limitation on the right of the US to locate its ABM system elsewhere.

Question: Wasn't the limitation to Grand Forks a common understanding , and not part of the treaty text?

Answer: In general, the provisions of agreed bilateral interpretations in the negotiating record of a treaty may be regarded as authoritative statements of the manner in which treaty provisions are to be interpreted; in particular, the Agreed Statements and Common Understandings in SALT I and SALT II have generally been regarded by the United States as having a legally binding character. However, whether an understanding is binding or simply a unilateral statement of intention depends on whether or not it appears, from the character of its wording and its history, to have been intended as binding by the parties. With respect to the Common Understanding to the ABM Treaty in which the US noted that its ABM system for the defense of ICBM launchers will be centered in the Grand Forks area, this does not represent a limitation to Grand Forks but only a statement of US intention at the time.

## NUCLEAR TESTING

QUESTION: The U.S. has not ratified the TTBT. Can the TTBT be enforced without OSIs?

ANSWER: In 1976, the U.S. and USSR separately stated their intention to observe the 150-kt threshold of the unratified Threshold Test Ban Treaty (TTBT), which also called for the use of national technical means (NTM) to monitor compliance. In this regard, the current basis for U.S. estimates of the yields of Soviet underground nuclear tests is the measurement of the seismic signals produced by the Soviet tests. However, our teleseismic monitoring stations are located outside the USSR which together with several other factors causes considerable uncertainty in our estimates of the yields of Soviet explosions. [Deleted.]

The TTBT Protocol contains provisions for a data exchange upon ratification, which the Soviets assert if implemented would reliably ensure the confidence of the parties regarding compliance with the agreement. However, this exchange actually would not improve verification sufficiently because the data are too limited and there is no provision for their independent authentication. Therefore, we have concluded that the TTBT would not be effectively verifiable with present provisions for verification.

[Deleted.] This type of on-site presence would improve significantly TTBT verification.

QUESTION: Have the Soviets been adhering to the terms of the TTBT?

ANSWER: In 1976, the United States and the Soviet Union separately stated their intention to observe the 150-kt threshold of the Treaty. No other terms--e.g. the TTBT Protocol which was designed to enhance existing seismic verification capabilities--were implemented by either side.

While the United States has observed the 150-kt limit since March 31, 1976, there have been a number of Soviet tests that produced seismic signals of sufficient magnitude to raise concerns about Soviet observance of the 150-kt threshold. However, our monitoring procedures contain inherent sources of error--some systematic and some random due to the statistical nature of the process--that result in large uncertainties in our estimates of Soviet yields. These uncertainties make it impossible to conclude definitively whether any individual Soviet test has exceeded the 150-kt threshold.

[Deleted.]

It should be pointed out that if the TTBT were ratified and the verification provisions implemented, a data exchange would ensue that could reduce the systematic error somewhat, if the information were accurate and could be independently authenticated. However, the TTBT does not provide for the independent authentication of this data. Nevertheless, the random sources of error due to statistical processes would still remain, and our yield estimates would still have large uncertainties that would prevent us from reaching conclusions in which we could have high confidence. Therefore, ratification of the TTBT and implementation of its verification provisions would not materially improve our seismic verification capability.

## COMPREHENSIVE TEST BAN

QUESTION: What would be the impact of a comprehensive test ban on our ability to modernize our nuclear deterrent, retain a reliable nuclear weapons stockpile and maintain a dedicated corps of nuclear weapons scientists?

ANSWER: Because of enormous Soviet military investments and deployments of new generations of strategic systems over the last two decades, the trends in the strategic balance have moved against the U.S. and threaten the survivability of the U.S. strategic deterrent forces. Nuclear testing allows the exploration of new concepts to help counter this trend, improve the nuclear deterrent and, thereby, strengthen the national security of the U.S. and that of its Allies. Testing also permits the enhancement of the safety and security of nuclear weapons. Because a Comprehensive Test Ban (CTB) would disallow the required testing, it would prevent the U.S. from deploying new nuclear weapon systems which might be safer, less vulnerable or otherwise more effective than existing systems.

With regard to the nuclear stockpile, testing has often been required to maintain high confidence that these weapons will perform as originally certified. Correcting problems which are detected within the stockpile inventory (which could encompass both design defects and physical deterioration) has at times relied upon proof testing. Being denied this final check under a CTB would promote a growing concern as to how an applied fix had affected the performance of the weapon. Hence, confidence in the reliability of the nuclear stockpile--and in the nuclear deterrent--would erode over time under a CTB.

Confidence in the U.S. nuclear deterrent also is based upon the ability to maintain the unique cadre of scientists and technicians capable of designing and developing weapons. Under a CTB, over time, many might turn to other employment. Another important consequence of a CTB involves the personnel connected with the Nevada Test Site. Without continuing underground test activity, it would not be possible to retain these workmen (e.g., specialized miners, electricians, pipe fitters, drillers). Their loss to other areas of employment would result in an extended start-up time upon a return to nuclear testing and a degraded capability for a considerable period thereafter. As President Kennedy said in 1962, "...in actual practice, particularly in a society of free choice, we cannot keep top-flight scientists concentrating on the preparation of an experiment which may or may not take place on an uncertain date in the undefined future. Nor can large technical laboratories be kept fully alert on a stand-by basis waiting for some other nation to break an agreement. This is not merely difficult or inconvenient--we have explored this alternative thoroughly, and found it impossible of execution."

QUESTION: Could a Comprehensive Test Ban be verified?
ANSWER: The answer to the question of whether a Comprehensive Test Ban (CTB) could be effectively verified requires an assumption on the scope of the ban, that is, on what is permitted and what is prohibited. If a CTB were to prohibit all nuclear explosions, a commonly held notion, monitoring compliance with such a ban, unlike a yield threshold, would require the capability to detect and identify every nuclear explosion regardless of yield, in all environments. However, detection of potential clandestine nuclear explosions has always presented a most serious problem, especially if complex evasion schemes were attempted to conceal these explosions.

To illustrate the problem, I will only focus on concealed underground nuclear tests, but evasive testing in other prohibited environments would present equally challenging verification problems. I am advised that use of evasion techniques might allow underground nuclear tests of up to tens of kilotons to escape detection or identification. One possibility would involve using a large underground cavity to decouple the seismic signals from an explosion. Another technique would involve timing a clandestine test to occur when the seismic signals it produced would be obscured by those of a large natural event.

Complications introduced by naturally occurring seismic activity cause additional problems with regard to verification of a CTB. Earthquakes produce signals which are difficult to distinguish from those produced by nuclear explosions of up to a few kilotons. This background of naturally occurring seismicity means that existing technology cannot provide a complete solution for the underground test detection task. Lacking such a capability, our government would be unaware of whether a complete test ban really existed. Moreover, it could lead to military asymmetries favoring the Soviet Union.

## PERSHING II

QUESTION: Do you see any relationship between failure of the Congress to fund the PERSHING II, the consequent deterioration in your negotiating leverage at the INF talks, and the impact that all of this might have on other US-Soviet arms negotiating?

ANSWER: Without the PERSHING II and GLCM, there is no incentive for the Soviets to reduce or eliminate their SS-20 missiles. No matter how skillful our negotiations, the prospects for success in the INF negotiations will be poor unless we proceed on schedule with our LRINF modernization program. The PERSHING II and GLCM are the very coin of our negotiating effort. Only after the Soviets became convinced of NATO's firm resolve on deployments did they agree even to begin arms control negotiations.

Question: Has the failure of the Congress to fund the Pershing II and the consequent deterioration in negotiating leverage at the INF talks had a negative affect on the START negotiations? Would the Soviets be any more likely to negotiate seriously at these arms talks if they see a weakening of US and allied resolve on intermediate-range nuclear force modernization?

Answer: Progress in START is linked to the outcome of the INF negotiations and modernization of the NATO LRINF forces. Any lack of resolve by the US or Allies to proceed with LRINF modernization in the absence of banning these systems could reduce the Soviet motivation to limit strategic forces. The more resolve that can be demonstrated by the US and our Allies to maintain adequate deterrents, the more likely the Soviets will be to negotiate seriously toward limiting LRINF and strategic systems.

## SOVIET OBJECTIVES IN INF

QUESTION: What is the ultimate Soviet objective at the INF talks? Is it to force a break in Allied unity on the INF issue, and then hopefully, a major split in the NATO Alliance?

ANSWER: By all appearances, the Soviet objective in the negotiations -- as reflected in their proposals -- is to prevent NATO deployments while retaining their own nuclear momopoly, and ultimately to eliminate the US nuclear presence in Europe. The Soviet Union is apparently seeking to limit the US ability to defend Europe and is trying to decouple the US strategic deterrent from NATO.

## PII FUNDING FAILURE AND INF

QUESTION: The US negotiating position at INF is now to permit an equal number of nuclear missiles and warheads, hopefully to a level as close to zero as possible.

Can you comment on how failure to fund the PERSHING II supplemental would be viewed by the Soviets, particularly given the fact that it woudl come so quickly after the US forwarded a revised proposal that moved away from the zero-option"?

ANSWER: A failure to fund PERSHING II would cause any Soviet incentive to negotiate seriously -- on our interim proposal as well as zero/zero -- to evaporate.

## SOVIET INTRANSIGENCE

QUESTION: Would the Soviets become even more intransigent, in hopes that the US would abandon or curtail the deployment?

ANSWER: These Soviets certainly might become even more intransigent in the face of a PII funding cut-off.

## CHANGES IN SOVIET POSITION

QUESTION: Do you honestly expect to see any changes in the Soviet negotiating position until after we begin deployment of the PERSHING IIs and ground-launched cruise missiles in December?

**ANSWER:** Only when the Soviets are convinced that they cannot preclude our deployments without giving up something themselves are we likley to see any change in the Soviet position. We would be delighted if the Soviets come to this realization before deployments begin. Realistically, it is only when the Soviets become convinced that our deployments will proceed, in the absence of an agreement eliminating LRINF missiles on both sides, that they will negotiate seriously toward an agreement. If that is after December, then we will continue to negotiate; as we have said, what goes in can come out.

## QUESTIONS SUBMITTED BY SENATOR D'AMATO

### ROLE OF ARMS CONTROL IN SOVIET MILITARY PLANNING

Senator D'Amato: In your opinion, what role does arms control play in Soviet Global military planning?

Answer: In Moscow's perception, arms control is an instrument supporting Soviet military policy and further broadens foreign policy goals. It is seen as an adjunct to military capabiliites in attaining larger military/political objectives. The Soviets attempt to use the arms control process to constrain Western military capabilities, to protect the development of its own military capabilities and to impair Western political will - particularly in responding to Soviet military developments. Arms control is specifically seen as a means of breaking apart the Atlantic Alliance and impeding the development of military countermeasures to Soviet military programs.

### FORMULATION OF SOVIET ARMS CONTROL POLICY

Senator D'Amato: Please describe how you believe the Soviet Union formulates its arms control policy?

Answer: [Deleted.]

### OBJECTIVES SOVIET ARMS CONTROL INITIATIVES

Senator D'Amato: What do you believe are the objectives of Soviet Arms Control initiatives?

Answer: Soviet strategy in arms control negotiations is designed to protect their military capabilities and programs under development and to constrain to the extent possible US existing and future weapon systems. This strategy is a direct reflection of the same doctrinal concepts that determine overall Soviet military strategy and is totally supportive of Moscow's foreign policy objectives.

### SOVIET EMPLOYMENT OF ARMS CONTROL NEGOTIATIONS

Senator D'Amato: Since arms control, of necessity and as its specific objective, directly affects the central factor in the military equation, it appears that the process of negotiating arms controls can be converted into a weapon by power seekers to gain a military advantage. Do you believe the Soviet Union has attempted to use its arms control negotiating positions to gain, maintain, or preserve military advantages over the United States?

Answer: The Soviet views the arms control process as furthering its relative military position by the dual objectives of constraining US military programs and protecting its own. In implementing these objectives, the Soviets advance positions in negotiations to attain military advantage over the US in those areas of comparison where they have not led the US. They also advance negotiating positions in an attempt to retain their currently held advantages.

### Compliance

QUESTION: Please describe the formal mechanism by which we enforce SALT I, SALT II, the ABM Treaty and the Threshold Test Ban Treaty.

ANSWER: Under Article XIII of the ABM Treaty and Article VI of the Interim Agreement, the Standing Consultative Commission (SCC) is responsible for considering questions of compliance under those agreements, for reconciling any misunderstandings or uncertainties arising in the performance of treaty obligations and for considering proposals to make the agreements more viable or to enact further arms control measures. A Memorandum of Understanding entering force on December 21, 1972 set up the SCC. Article XVII of the unratified SALT II Treaty provided that the SCC extend its purview to exercise under SALT II responsibilities similar to those it was given under previous treaties.

The SCC first convened in May 1973 and brought into force Regulations which govern its internal operation. Normally it meets in Geneva in the spring and fall, and there have been twenty-four sessions thus far. The US and the USSR each are represented at the SCC by a Commissioner and a Deputy Commissioner, who are assisted by such staff and advisors as their respective government deems necessary. Either Commissioner may request that special sessions be convened, and between sessions the Commissioners communicate with one another through diplomatic channels concerning any matters within the competence of the Commission. SCC regulations provide that proceedings will be private, the purpose being to facilitate direct and frank exchanges. Both US and Soviet delegations operate under guidance and instructions from the highest levels of their governments. US officials, including the Congress, are informed of proceedings at the appropriate classification levels.

The SCC provides a forum for discussion of compliance issues, but it operates by mutual agreement, so compliance concerns can be settled therein only to the extent that viewpoints are similar or one side accommodates the other's expectations or interpretations. There is no mechanism actually to "enforce" treaty compliance in the sense that binding interpretations may be imposed to deal with questionable actions or punishment may be prescribed and rendered for violations. The respective national governments must determine what their policy and enforcement mechanisms will be when agreement cannot be reached; the treaties themselves establish no guidelines, except insofar as they provide the right to and procedures for abrogation if the supreme national interest is considered to be jeopardized by continued observance. Under the unratified Threshold Test Ban Treaty there is no established forum or method even for raising compliance issues. Article II.3 states that "to promote the objectives and implementation" of treaty provisions "the Parties shall, as necessary, consult with each other, make inquiries and furnish information in response to such inquiries." Similarly, Article V provides that while the treaty is in force "the Parties may, as necessary, hold consultations to consider the situation relevant to the substance of this Treaty and to introduce possible amendments to the text of the Treaty." Therefore, compliance issues under the TTBT have been raised at the diplomatic level.

QUESTION: Please describe your understanding of the domestic political process which would have to occur in the United States for us to effectively respond to a proven Soviet arms control break-out on a large scale.

ANSWER: Assuming that such an eventuality should occur, the US government probably would wish to redress the balance of military power by deploying as rapidly as possible offensive and/or defensive systems designed to counter perceived Soviet advantages, perhaps simultaneously applying diplomatic pressure on the Soviets and adopting prescribed measures for abrogation of the treaties in question. Congressional authorization of additional forces and of more rapid deployment of previously approved projects would be required, and funding of defense programs probably would have to be increased significantly and quickly. To secure programmatic and budgetary support and avoid political backlash, the Administration would have to convince the Congress and ultimately the general public, if they were not already so persuaded, that: the Soviets were acquiring superior military power with military or at least political utility; Soviet actions had rendered the arms control treaties in question useless and even dangerous; further negotiations probably were hopeless, given the Soviet manifestation of hostile intent and bad faith, or at least that we could not afford to postpone vigorous compensatory moves while awaiting the outcome of such negotiations; we were not being unnecessarily provocative in engaging in a large-scale buildup; and that our situation was not so hopeless that our only realistic course of action was to concede Soviet military superiority. Effective response to a Soviet breakout therefore would require convincing evidence and a persuasive interpretation of its implications, plus strong leadership able to galvanize domestic support for a sharp alteration in military and diplomatic policy. It would also require drastic changes to speed up the weapons acquisition process.

QUESTION: In your opinion, what standard of evidence must the U.S. meet under existing arms control treaties to prove Soviet violations? Proof beyond a reasonable doubt? Clear and convincing evidence? Preponderance of the evidence?

ANSWER: Discussions of evidential requirements to "prove" an absolute violation often center implicitly on criteria needed to present a virtually irrefutable case of noncompliance before a court of law. Problems raised in this context generally involve not only ambiguities in our information but, probably even more importantly, the vagueness, unintentional omissions or doubtful legal force of treaty-related documents. There is a tendency to require strict proof beyond a reasonable doubt that there has been a technical "violation" of any plausible interpretation of treaty text and even to apply to treaties the standard associated with US criminal law that a party is innocent until proven guilty.

Highly technical, legal aspects of compliance issues obviously are relevant to policy considerations. But we must not lose sight of the fact that compliance issues and relevant US policy will be judged by public opinion rather than by a court of law and that these ultimately should and will be based largely on political and military rather than legal criteria. For instance, it is unlikely that any US Administration would wish fundamentally to alter its own policy toward a treaty, or that it could secure the public support to do so, on the basis of acts by another party which demonstrably were in legal violation of an accord but which were technical in nature and of no military or political significance (although repeated minor infractions might be interpreted as expressions of contempt for arms control obligations). This may be contrasted with the opposite situation, in which known or suspected activities are of grave significance individually or collectively. In the latter case, the question of whether a technical "violation" can be proven must be subordinated to the question of how the treaties, as they are being interpreted and observed, affect our national security, and whether the US should alter its own behavior and arms control policy so as to ensure a continuing balance of military power. The rationale for negotiating arms control treaties, after all, is to codify an equitable and stable balance of military capability, and thereby to enhance US and Western security. If their effect on us in this respect is detrimental rather than beneficial, they have lost their reason for existence, and substantive considerations become more important than strictly legal ones in determining and explaining policy. Moreover, given the legal or intelligence ambiguities usually associated with highly complex compliance issues, to demand absolute evidence of a "violation" of the treaty text may simply breed chronic indecision or even lead to paralysis of judgment, thereby undermining the entire arms control process by inviting circumventions on a large scale. Obviously, tolerance for suspect or legally ambiguous activities also should be affected by the past compliance record, general credibility and estimated intent of the other party.

QUESTION: How necessary is it for the President to be able to build public and Congressional support for a strong response before the U.S. could take action to redress a Soviet arms control breakout?

ANSWER: As indicated above, I believe a large-scale and concerted public information campaign would be essential to win acceptance of the altered procedures and increased expenditures which would be needed.

QUESTION: How important is it to the consensus building process for the President to be able to present hard, factual, credible evidence of Soviet violations? How useful are unsupported allegations based only on the President's word?

ANSWER: My replies above concerning the domestic political aspects of dealing with compliance issues such as breakout are relevant here. Noting again that the problem involves legal as well as intelligence ambiguities, I would add my own personal estimate that the public would be less concerned with and swayed by alternate legal interpretations than by what we intended and could reasonably expect the agreement to outlaw and by the military effects of the action(s) involved. With regard to intelligence problems, unwillingness to reveal how we secure our information, and thus to enable the Soviets to block such sources in the future, sometimes has hindered willingness to pursue compliance issues vigorously and in detail. Moreover, as indicated above, intelligence often can show a possibility or liklihood of certain activities but cannot offer totally definitive proof. The public probably would accept the President's word that sensitive intelligence showed possible or highly probable compliance problems. If these issues were of considerable military significance, the public would be unlikely to insist that US action to redress the situation be contingent on irrefutable evidence and totally unambiguous treaty clauses; however, it might be inappropriate as well as unnecessary to charge an outright "violation" in such cases. To a large degree the public's reaction will depend upon the manner in which the issue is presented and the way in which the terms of the debate are set, plus the nature of any US policy change for which support is requested.

QUESTION: Once we had confirmed, to the satisfaction of our experts, that a Soviet strategic arms control breakout had occurred, how long do you believe it would take the President to forge the necessary political consensus to support the dramatic reordering of national priorities which would be required to respond to such a breakout?

ANSWER: The answer most likely would be highly dependent upon the prevailing general attitudes and on the circumstances surrounding the issue. In general, it should be noted that one would first concentrate upon persuading the Congress of the need for action, possibly a more manageable task than quickly educating the public at large on these issues. Congress might be willing to take vigorous action even in the absence of a wider public consensus, especially if it were anticipated that such a consensus could be formed in a timely fashion.

QUESTION: How would you characterize the level of proof the U.S. Government has produced to support its allegations of Soviet violations of the 1925 Geneva Protocol and the 1972 Biological and Toxin Weapons Convention?

ANSWER: As conclusive. I have no doubt that the fulsome body of evidence and information which the United States and others have collected and analyzed (concerning toxin and lethal chemical weapons used in Southeast Asia and Afghanistan) does provide a conclusive basis on which to reach a conclusion that these weapons are being used.

QUESTION: How would you characterise world public reaction to our presentation of this evidence? Domestic public reaction?

ANSWER: There can be no question that, at first, United States efforts to call attention to the "Yellow Rain" problem were greeted both here and abroad with a degree of skepticism, and in some quarters, with outright disbelief. But this is no longer the case. Our view that chemical and toxin weapons indeed are being used today is beginning to be more widely shared as the evidence and information we have put together and presented has been more carefully studied by experts. As interest and concern have grown, independent investigations by other countries and private groups have been initiated and they have generally corroborated our findings. So, I would now characterize U.S. media and public opinion reaction as quite good. But we are not fully satisfied that this important matter has provoked as much attention and concern in the international community as it should. The Administration is, therefore, determined to intensify the U.S.'s public opinion campaign on this subject and we intend to maintain international pressure on the Soviets to halt the use of toxin and chemical weapons.

The Soviet reaction to our charges is one indication of the effectiveness of the evidence of use we have presented. A massive outpouring of Soviet disinformation and propaganda over the past six months, aimed at deflecting attention from "Yellow Rain" issues to allegations about U.S. use of Agent Orange in Vietnam, signals Soviet sensitivity to the charges and shows that they are concerned about the evolving international climate of opinion concerning chemical weapons use.

QUESTION: Currently, the Department of Defense is requesting funds to initiate production of binary chemical weapons, in the aftermath of charging significant Soviet violations of arms control agreements forbidding the use of chemical and biological weapons which both the U.S. and U.S.S.R. signed and ratified. Reportedly, these violations are present operational evidence of a significant Soviet military capability gained through deliberate violation of arms control agreements. How would you describe the results of the Administration's efforts to muster public and Congressional support for a meaningful U.S. response to these Soviet violations?

ANSWER: The Administration has worked hard to muster both public and Congressional understanding of, and acceptance for, its view that acquisition and maintenance of a small -- but militarily useful -- chemical weapons stockpile is absolutely necessary to deter the use of chemical weapons against us and our allies.

Our concern is that thirteen years of a unilateral freeze on chemical weapons production and the intensive efforts made to achieve a treaty banning chemical weapons have proven fruitless. Moreover, our current stockpile is not a credible deterrent since it lacks some capabilities entirely and existing capabilities are aged and deteriorating. We remain most concerned that the retaliatory capability we do have is being undermined by age and lack of modernization. We are convinced that deterrence of chemical warfare cannot prudently rest on a purely defensive capability. That is why the Administration is seeking this year to convince the Congress and public opinion of the need to restore an effective retaliatory capability. Not to do so undermines our determined efforts to achieve a chemical weapons ban and, in the event of war, would leave us with no alternative to nuclear weapons use to avoid defeat.

During last year's debate over chemical weapons procurement it became clear to us that there are major areas of agreement between proponents and opponents of chemical weapons modernization. These areas are:

- An aversion to chemical weapons, as common within the military as without.
- A genuine desire for a complete and verifiable ban on chemical weapons as the preferred solution to eliminate the threat of chemical warfare.
- Recognition of the Soviet Union's formidable capability to wage chemical warfare and the need to deter them from using this capability.
- Little or no desire to invoke the threat of nuclear response to deter chemical warfare.
- Support of a program to improve U.S. defensive capabilities to include more and better training and new equipment.

- Acknowledgement that defensive measures alone are insufficient to deny a military advantage to an aggressor and, therefore, some retaliatory capability is required to deter.

- Support of continuing the existing U.S. policy of absolutely no biological or toxin weapons and chemical weapons only for retaliation.

Despite these areas of broad agreement, Congress last year denied funds to the chemical weapons modernization program. Some members expressed concern that the Administration was turning away from arms control and was trying to initiate a new arms race by requesting funds for binary chemical munitions production. I want to stress, categorically, that it remains the goal of the United States to achieve a complete and verifiable ban -- a goal we are working towards with determination. Until we achieve an effective ban, however, I believe we must modernize and maintain our chemical warfare capability.

### CBW VIOLATIONS

QUESTION: Can you draw any parallel between what is now transpiring regarding military significant Soviet violations of chemical and biological weapons control treaties and what would occur if the Soviet Union were were to violate nuclear weapons control treaties?
ANSWER: The one parallel that is easy to draw is that signing a treaty does not automatically guarantee compliance on the part of the Soviet Union. This factor provides cogent support for the arms control criteria I have described in my statement. In particular, arms control agreements must be flexible to allow us the capability to adjust our deterrent force structure so that it remains credible in light of the evolving Soviet threat; they must be drafted with precision so the obligations are clear; and they must be verifiable so each side could have confidence that the other parties are complying with their treaty obligations.

### NTM

QUESTION: Since present arms control treaties are based on "national technical means" for their verification, evidence of violations is in the form of highly classified products of the U.S. intelligence systems. Should the President be free to disclose and discuss this evidence in public and diplomatic forums?
ANSWER: The President should be and is free to make the final decisions as to whether and when to bring such matters to diplomatic and public fora. Very often, information gained by "National Technical Means" (NTM) is not clear cut. Moreover, there are ambiguities within the language of past arms control agreements which furthur cloud the issue. Hence, the first step we take in the process of determining how to proceed is to evaluate the information derived from NTM in the context of our understanding of the provisons of existing arms control agreements. If there continues to be cause for concern, then a decision is made as to how to raise the issue with the Soviets so as to not reveal sensitive intelligence sources and methods and whether and when to address the issue publicly.

QUESTION: Since using the actual evidence of Soviet violations produced by our "national technical means" would reveal this nation's most sensitive intelligence sources and methods, it is doubtful this evidence would be released until the threat to our national survival caused by a Soviet breakout was clear beyond dispute. How important is the response time we would lose due to our inability to release not yet conclusive evidence so the President could use it to organize support for national response?

ANSWER: Decisions on when and how to release raw data produced by national technical means are dependent on the circumstances. Such circumstances would include the military significance of Soviet actions , the state of our forces, and the extent to which it was necessary to release precise data publicly in order to gain support for defense programs. The President would have to assess the situation carefully and make his decision on the basis of our overriding national security concerns.

## SOVIET BREAKOUT

QUESTION: Since a Soviet strategic arms control breakout would likely be disguised by a well-designed strategic deception plan employing a progaganda peace offensive against the people and the elected leaders of the Western democracies, and initial indications of the breakout would most probably be ambiguous and fragmentary, how effective do you believe our intelligence analysis and security policy process would be in making an accurate, early decision that such a breakout had begun?
ANSWER: Your question underscores the reason why it is absolutely essential that future arms control treaty provisions be written so as to leave little or no room for ambiguity and that verification measures and procedures provide for timely access to information necessary to confirm Soviet compliance or that a violation had occurred. Once these measures and procedures are agreed upon, it will be possible to estimate our monitoring confidence for various provisions of arms control agreement.

QUESTION: Given our current strategic balance with the Soviet Union, how critical do you believe it would be for us to recognize and properly assess at the earliest possible point a Soviet strategic arms control breakout?
ANSWER: Soviet breakout from strategic arms control treaties would have grave consequences for U.S. national security. Therefore, it would be critical for the U.S. to establish at the earliest time possible the fact of such a breakout. Consequently, this problem receives careful attention when we determine our arms control negotiating positions, and provides additional justification for the arms control criteria described earlier. The agreement must be written with foresight, precision and simplicity to make it extremely difficult to acquire secretly major military advantages, and so that once such activities are observed they can be clearly branded illegal and are not subject to endless controversy and uncertainty. Certain test and throw-weight limitations, for instance, could reduce the ease with which a significant military advantage could be achieved quickly. The treaty must have provisions for effective monitoring to raise the risks and lower the incentives for covert preparations for breakout, and enable us to detect and identify the illegal activities as soon as possible. Finally, we must retain flexibility to counter any Soviet attempt to tip the strategic balance in their favor.

## U.S. STRATEGIC WEAPON PRODUCTION

QUESTION: What U.S. strategic nuclear weapon delivery system production lines are open and producing delivery systems now?
ANSWER: We are currently producing the ALCM and the Trident I (C-4)

SLBM. We are preparing to begin production of the Peacekeeper (MX) ICBM and the B-1 bomber, both of which have IOCs in 1986.

QUESTION: Under a crash program, how long would it take us to put into production a new strategic nuclear weapons delivery system, beginning with a clean sheet of paper?
ANSWER: The time required to develop a weapons system from concept design to deployment clearly depends upon the nature of that system and the degree to which it draws on previous engineering and design work. Thus, there is no clear single answer to the question. As an example, however, there is the case of the new small ICBM. The system is currently in the early stages of concept design, and we are anticipating an IOC sometime in the early 1990s.

## PRODUCTION OF DELIVERY SYSTEMS

Senator D'Amato: How many Soviet strategic nuclear weapons delivery system production lines do we believe are now producing new systems?
Answer: [Deleted.]

## SOVIET BREAKOUT

QUESTION: How important is it for us to have open strategic nuclear weapons delivery system production lines as a hedge against a Soviet decision to stage a strategic arms control limits breakout?
ANSWER: Completion of force modernization and achievement of an effective arms reduction agreement along the lines I have described earlier would reduce the dangers arising from such a Soviet policy and would allow us more flexibility in coping with an attempted breakout. Under these circumstances, it would not be absolutely necessary to keep strategic delivery system production lines open for the sole purpose of hedging against Soviet breakout.

QUESTION: Do you believe the Soviet Union could gain a significant military advantage if they were able to disguise a strategic arms control limits breakout until they had developed production momentum?
ANSWER: The Soviets could achieve significant advantages if we did not recognize a breakout attempt in the early stages of buildup. Upgraded verification measures should strive to increase the risk that a breakout attempt would be detected and improve our warning time if the Soviets nevertheless determined upon such a policy.

QUESTION: Since the Soviet Union can conduct preparations for and proceed through the early stages of a strategic arms control limits breakout without providing us with unambiguous evidence of their intent, they can gain as much as several year's lead on us. What actions should we take to guard against such a Soviet decision to breakout of strategic arms control limits so that they do not gain a decisive advantage over us before we can respond?
ANSWER: As I mentioned before, we should complete our strategic force modernization program and pursue effectively verifiable arms reduction agreements. The monitoring provisions of such agreements should provide methods and access to investigate suspicious incidents; otherwise, to protect ourselves we may have to adopt less rigorous standards of evidence than we would prefer as justification for a change in procurement or arms control policy.

## UNCLASSIFIED EVIDENCE

QUESTION: How important to our ability to enforce arms control agreements we enter with the Soviet Union is it to agree upon verification procedures which produce relevent factual evidence which is not classified and which can be extensively and openly disclosed and discussed in all public and diplomatic forums?
ANSWER: I believe that it is critical that any future arms control agreements incorporate the cooperative measures that are necessary to provide for effective verification. To the extent that judgments based on information gathered by these means are independent of our findings through NTM, cooperative measures will facilitate discussion with the Soviets as well as public discussion, since our current concern with the implications for U.S. intelligence sources and methods would not be a factor. Further, to the extent that cooperative measures provide for disclosures, as would some data exchanges, the Soviets will have to expect that their actions will be scrutinized more closely by the public.

## NTM

QUESTION: Do you believe our reliance on "national technical means" to verify our strategic arms control agreements would make us hesitant to allege Soviet violations when we possess only highly classified and somewhat ambiguous evidence of such violations?
ANSWER: As I noted earlier, your question underscores the reason why it is absolutely essential that future arms control treaty provisions be written so as to leave little or no room for ambiguity and that verification measures and procedures provide for timely access to information necessary to confirm Soviet compliance. Clearly, information obtained through measures and procedures other than NTM would be more readily releaseable.

## SOVIET BREAKOUT

QUESTION: Do you believe the subject of a Soviet arms control limits breakout has received adequate attention from our defense and foreign policy officials?
ANSWER: Yes. The breakout issue is one of the major concerns of our arms control planners and negotiators. This importance is reflected, for instance, in several provisions of our START proposal which addresses breakout possibilities ignored by previous arms control agreements.

QUESTION: Do you believe the subject of a Soviet arms control limits breakout has been adequately discussed in the U.S. mass media and in Congress?
ANSWER: No, it has not. It is incumbent on both the Executive Branch and the Congress to present to the public and to the mass media a more realistic view of the complexities of arms control, such as the necessity of closing off "breakout" routes.

And for the record, I would like to define what "breakout" means. Breakout potential refers to the capability of one side to deploy rapidly forces that greatly exceed treaty limitations, and therefore could significantly alter the strategic balance. For example, should the Soviets stockpile large numbers of nuclear-armed missiles and be in the position to deploy and launch them quickly, they might be able to "breakout" upon either treaty abrogation or expiration.

## SOVIET TACTICS

QUESTION: If the Soviet Union were to see the arms control process as yet another weapon in their struggle to gain the ascendency over the United States, and were to employ deceptive negotiating tactics in support of their military goals, do you believe our present arms control policy process is adequate to respond to such a Soviet strategy?

ANSWER: Yes. We have learned a great deal about Soviet negotiating behavior over the last 15 years, and our current negotiators, Ambassadors Nitze and Rowny, have had many years of negotiating experience vis-a-vis the Soviet Union.

## SOVIET PROPAGANDA

QUESTION: Do you believe the Soviet Union has been successful in exploiting our domestic political process to manipulate our negotiating positions and tactics in strategic arms negotiations?

ANSWER: No. However, the Soviets have tried to influence the Western peace movements, by propaganda and other means, to exert pressure on their governments not to deploy new nuclear systems. As I have said before, any disunity which may result makes it more difficult for our officials to negotiate effectively with the Soviet.

## STRATEGIC DEFENSE

QUESTION: Please describe what steps the Department of Defense has taken to pursue the President's decision to explore the possibility of an active strategic defense against nuclear attack.

ANSWER: In his nationally televised March 23, 1983 speech, the President called for a new initiative to explore means of defending the United States and its allies against the threat of nuclear ballistic missiles. As a first step, the Department of Defnese, together with other Government agencies, including the Department of State, the NSC staff, and the Arms Control and Disarmament Agency, has undertaken a major study to examine the political, strategic, and technological issues associated with this initiative.

## Shuttle Orbiters

Question: Do you believe we should be taking action now to increase the number of shuttle orbiters in our fleet?

Answer: The planned number of shuttle orbiters in the US fleet was determined based on budgetary considerations, balancing our needs for additional orbiters compared to our needs regarding other matters. I agree with the balance taken and consequently do not believe we should be taking such action at this time.

## Space Launch Complexes

Question: Do you believe it is wise to have both of our space launch complexes (at Vandenberg AFB and Cape Canaveral) on the coast so they are vulnerable to a sneak conventional attack?

Answer: The locations of both those launch complexes was chosen so that flights would begin over water and thus pose no danger to populated areas. I believe such a choice is appropriate and that if we believe it necessary, the United States could take appropriate measures to maintain the security of those launch facilities.

## Quick Reaction to Orbit

Question: Do you believe we should develop a "quick reaction to orbit" capability, so we can quickly replace orbiting systems which are vital to our security if they are put out of action either through mechanical failure or enemy action?

Answer: Yes, we should develop such a capability. However, it should be a long-term effort to complement our other replenishment schemes such as "store-on-orbit" for critical spacecraft. Further, our current technology will not permit us to develop a near-term quick reaction to orbit capability. Fortunately, our projection of the requirements indicate that we may have enough time to develop the necessary technology if we get started now.

The Soviet threat is closing off past operating regimes. Even the highest performance aircraft cannot overfly certain denied areas. The Soviet ASAT eliminates the sanctuary for some low altitude orbits. Our current technology cannot support development of the kind of systems needed to operate in the threat environment likely in the late 1990s. It requires from 15-20 years to move from the current state of technology to an operational system.

We have an Air Force program--the Advanced Military Spaceflight Capability, or AMSC, program--in the FY 84 budget at $2.8 million. The AMSC program will do mission and concept analysis and begin the technology development work. The mission analysis will not only consider the launch vehicle role, but will also consider other possible uses--including being a weapons platform. Even by starting now, it will be the late 1990s before we have an operational capability.

## On-Orbit Spares

Question: Please compare the merits of on-orbit spares and quick reaction to orbit capabilities for our overhead systems.

Answer: From the perspective of defense policy, two major differences exist between such capabilities. On-orbit spares would be more quickly available in the event the primary satellites became unavailable for some reason; however, those spares would also be subject to the same failures causes as the primary satellites, e.g., decreased reliability associated with additional time in orbit and possible hostile action by an adversary.

## Security of Space Systems

Question: Do you believe we have done enough to ensure that our orbital communications assets are survivable?

Answer: Yes. I believe that the ongoing program to enhance the survivability of US national security space systems is appropriate.

## Soviet Anti-Satellite Capability

Question: Do you believe the Soviet Union is developing a capability to attack our assets in medium, synchronous, and post-synchronous orbits?

Answer: We have no confirmation that the Soviets are developing such capabilities. The United States currently has, and increasingly will have in the future, space systems at high altitudes that are important. The Soviets are likely to consider that these systems would warrant the development of such capabilities.

## Anti-Satellite Weapons

Question: We have engaged the Soviet Union in talks to ban anti-satellite weapons. Those talks were not successful. Should we make another serious try to secure such an agreement?

Answer: The United States will not seek to negotiate an agreement limiting anti-satellite weapons until we have identified a verifiable and equitable proposal that would be appropriate as the basis for negotiation. While we continue to search for such measures, we have not yet identified any that would be consistent with our national security.

## US and Soviet Space Weapons

Question: Please provide a comparative discussion of US and Soviet space weapons, addressing specifically the Soviet Fractional Orbital Bombardment System and their current ASAT system.

Answer: The Soviet Union has tested a fractional orbital bombardment system using missiles located in special launchers in the area of Tyura-Tam in the Soviet Union. The Soviets agreed as part of the SALT II Treaty that, upon entry into force of that agreement, they would dismantle or destroy twelve of those launchers and convert the remaining six to launchers for testing missiles undergoing modernization. The United States has not had and has no plans to develop a fractional orbital bombardment system.

The Soviet Union has had an operational anti-satellite system which threatens satellites in near-earth orbit for more than a decade. The United States is currently developing an anti-satellite system, which will also have capability against satellites in near-earth orbit. The US anti-satellite system is scheduled to be operational in the latter part of this decade.

## 1967 Outer Space Treaty

Question: Please explain how the Soviet FOBS system was compatible with the 1967 Space Treaty banning weapons of mass destruction from space.

Answer: The 1967 Outer Space Treaty banned nuclear weapons and other weapons of mass destruction from being placed in orbit. The Soviet fractional orbital bombardment system was based on the ground, and thus has never been used to place a nuclear weapon in orbit (we believe its tests were carried out without incorporating nuclear weapons on the missiles). The actual use, however, of such a system against the other party would not be compatible with the Outer Space Treaty.

## NUCLEAR WEAPONS IN SPACE

QUESTION: Has the U.S. ever placed nuclear weapons in space?

ANSWER: No, the U.S. has never placed nuclear weapons in space and is bound by treaty not to do so. In the early 1960s the U.S. did undertake some nuclear tests in the upper reaches of the earth's atmosphere. This activity was subsequently terminted as a result of the 1963 Atmospheric Test Ban Treaty

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## QUESTIONS SUBMITTED BY SENATOR PROXMIRE

### SOVIET COMPLIANCE

QUESTION: Do you agree that the U.S.S.R. has violated the Biological Weapons Convention?
ANSWER: Yes, I do. My belief rests on solid evidence we have assembled that an accident occurred at Sverdlovsk in the spring of 1979 involving the airborne release of anthrax spores which resulted in a significant number of fatalities. It is our judgment that the dimensions of the anthrax outbreak indicated the release of quantities of anthrax spores beyond a level which is permitted under the 1972 Biological Weapons Convention (BWC) for prophylactic, protective or peaceful purposes. We concluded that sufficient grounds existed to warrant consultations with the Soviet Union under Article V of the BWC. In numerous demarches, starting in March 1980 and continuing into April 1983, the United States made clear that the Soviet response of acknowledging an outbreak of anthrax but attributing it to "natural causes" was not considered a satisfactory response. In continuing to express our dissatisfaction with the Soviet explanation , we have reaffirmed our position that the most effective way to resolve the problem would be through consultations as provided for under Article V of the BWC. In my view, the Sverdlovsk incident clearly underscores the desirability of strengthening the obligation of State Parties to address compliance concerns and to improve BWC mechanisms to do so. The U.S. has, therefore, strongly supported efforts in the United Nations to convene an early meeting of State Parties for the purpose of strengthening BWC verification and compliance mechanisms.

QUESTION: Do you agree that they have violated the 1925 Geneva Protocol?
ANSWER: Yes, I do. As the two reports already made to the Congress by Secretaries Haig and Schultz (Special Report #98 of 22 March 1982 entitled, "Chemical Weapons in Southeast Asia and Afghanistan," and Special Report #104 of November 1982 entitled, "Chemical Weapons in Southeast Asia and Afghanistan - an Update," respectively) clearly indicate, the United States has assembled overwhelming evidence of the use of toxin and other lethal chemical weapons ("yellow rain") in the current conflicts in Laos, Kampuchea and Afghanistan. We continue to receive reports and evidence confirming the continuing use of these lethal weapons. Not long ago, the Government of Canada submitted a report to the UN which strongly supported the conclusion that trichothecene and mycotoxin agents are being used. Also, there is a growing body of international evidence from non-U.S. private experts which supports U.S. findings of chemical weapons use. Indeed, the December 1982 report of the UN Experts Group provided substantial corroboration of use drawing on human testimony and laboratory data. The UN report's failure to fully support U.S. charges is understandable given the political context in which the report was prepared. Most of the world press viewed the report as

providing as much support to U.S. charges of toxin and chemical weapons use as could be reasonably expected from a multilateral entity--and its failure to give full support was attributed to political, as distinct from scientific, inhibitions of the Experts Group.

## SOVIET CHEATING ON TTBT/LTBT

QUESTION: Do you think they have cheated on the Limited Test Ban and/or the Threshold Test Ban Treaty?
ANSWER: The LTBT prohibits nuclear testing in the atmosphere, outer space, and under water. Perhaps less known is the prohibition of nuclear testing in any other environment (i.e. underground) if such explosion causes radioactive debris to be present outside the territorial limits of the party conducting the test. To date, there have been no recorded events labeled as obvious Soviet violations of the LTBT, that is, nuclear explosions in the atmosphere, outer space, or under water. However, radioactive gases vented from Soviet underground nuclear tests have been detected beyond the territorial limits of the Soviet Union on a number of occasions.

When these ventings were brought to the attention of the Soviet Union, the U.S. did not generally accuse the Soviets of actual Treaty violations but, rather, of actions inconsistent with the terms of the Treaty. The Soviets' response in every case was that their precautions precluded the possibility of such an occurrence; therefore, according to the Soviets, there was no ground for complaint. They also disagreed with what they claimed were U.S. assertions alleging that a violation of the LTBT had taken place.

With regard to the Threshold Test Ban Treaty (TTBT), the United States and the Soviet Union stated separately their intention to observe the 150-kt threshold after 31 March 1976. However, since then, a number of Soviet nuclear tests have produced seismic signals of sufficient magnitude to raise concerns about Soviet observance of the 150-kt limit. Because of the statistical nature of monitoring by teleseismic means and the resulting uncertainties, we cannot conclude definitively that the Soviets have actually exceeded the 150-kt limit.

When we raised the specific tests with the Soviet Union, the Soviets stated that the tests did not exceed the threshold and urged us to ratify the Treaty so that the verification provisions could be implemented. In 1974, it was thought that these provisions, which called for an exchange of geophysical and yield-calibration data, would improve the accuracy of teleseismic verification. Today, following extensive study of our monitoring capabilities, we believe that these data might improve capabilities marginally, if the data could be authenticated. But, the TTBT does not provide for authentication of this data, and if the Soviets have actually exceeded 150-kt, I would not expect them to give us data that would prove a violation. For these reasons, I consider the current verification provisions of the TTBT to be insufficient for providing an effective monitoring capability.

QUESTION: Do you think Soviet cheating is a function of the lax kind of verification procedures we have allowed in our treaties or is it a function of Soviet perfidy - that they will cheat regardless of verification standards?
ANSWER: It is not our practice to comment publicly on possible Soviet violations of Treaties, such as SALT, before they are discussed with the Soviets and until such questions have been resolved by a body such as the SCC. Thus, I cannot comment specifically on past Soviet

"cheating". I would note that the ambiguities in existing Treaty provisions and verification procedures have contributed to the difficulty of ascertaining whether certain Soviet activities are in compliance with the letter and spirit of the Treaty constraints.

This Administration believes that effective verification is fundamental to the viability of the arms control process and a condition for U.S. agreement to any arms control treaty. Thus, we will not agree to treaties that are loosely worded or that do not provide for effective verification.

QUESTION: If the Russians have cheated on the Biological Warfare Treaty, involving one of the most horrible and repugnant forms of warfare known to mankind, why should we be thinking of entering into any kind of arms control negotiations with them? What makes you think they won't cheat on nuclear weapons if they cheat on biological weapons?

ANSWER: A recent exception to the U.S. principle of incorporating effective verification provisions into any treaty which it ratifies is the Biological Weapons Convention ratified in 1975. At that time, the U.S. believed that all parties had reached common and firm agreement on the issue of destroying all biological weapons and, hence, verification was not a commanding issue. However in 1979, an accident at Sverdlovsk, in which anthrax spores were released following an explosion (but which has not been satisfactorily explained by the U.S.S.R.) has led the U.S. to press for a more rigorous verification and compliance regime. To this end, we and our Allies are supporting a Swedish initiative in the UN, to convene early next year, to convince the signatories to review verification mechanisms.

Our experience with the Biological Weapons Convention as well as our concern with the record of Soviet activity under other treaties underscore the need for effective verification provisions in future nuclear arms control agreements.

## IMPROVING SUBMARINE SURVIVABILITY

QUESTION: Is there some way through arms control that we can improve the invulnerability of our submarine fleet--that is by limiting Anti-Submarine technology or try the creation of ASW free zones at sea?

ANSWER: Our current and projected SSBN survivability is very high, and it is difficult to see how it can be improved through the steps mentioned above. The possibility of limiting ASW technology and creating ASW free zones has been investigated previously and has been found wanting for reasons of effectiveness, verifiability and practicality. The best assurance of continued SSBN survivability is the maintenance of the Trident I and the deployment of the Trident II systems which permit our strategic submarines to operate over vast ocean areas with virtual undetectability.

## ARMS CONTROL

QUESTION: Are we necessarily safer in a world of smaller numbers of warheads, launch vehicles and throwweight, but with greater destructive capacity?

ANSWER: We are seeking to reduce the number of warheads and the amount of throwweight in our START agreement because they are the key measures of strategic capability. If we are able to achieve an arms reduction agreement which reduces warheads and throwweight in an equal, balanced, mutual and verifiable manner, then we will, by definition, have reduced the threat we face. Moreover, if the arms control regimes can be structured to encourage movement by both sides to more stabilizing force structures, then we will have made an important contribution to enhanced safety.

QUESTION: You have written extensively about the quiet war--the flow of high technology from the West to the Soviet Union. Technology plays such an important role in opening up new areas of military competition. To what extent can we shackle technology in applying arms control restraints. For example, can we curtail improvements in accuracy of ICBMs through arms control?
ANSWER: I would like to stress that the Soviets use overt and covert flow of Western and Japanese technology in order to reduce the cost and the length of their military R & D programs, as well as to avoid pursuing unpromising lines of research. For instance, the provision of U.S. precision grinding technology permitted the Soviets to markedly improve the accuracy of their ICBMs, which now threaten the survivability of our Minuteman. It is for these reasons that this unacceptable drain of high technology needs to be closed--to prevent the Soviets from getting a free ride.

The general limitation of technology through arms control raises a different and more complex issue. For one thing, we must clearly differentiate between the application of high technology for aggressive purposes and those which seek to establish strategic stability or correct a destabilizing asymmetry. Thus, the elimination of the current, destabilizing asymmetry in prompt, hard target kill through the deployment of the Peacekeeper, and the potentially stabilizing development of a new, small ICBM, clearly represent a beneficial application of high technology. At this stage, if we could effectively freeze ICBM technology--and it is not self-evident that we can--we would end up in a most destabilizing situation where we could not resolve our prompt, hard target kill asymmetry with the Soviets and assure the future survivability of our ICBMs.

## START

QUESTION: Do you think it is practical that we can in effect de-MIRV the ICBM fleets on both sides through arms control? Or is that impossible once a technology such as MIRV has been deployed?

Answer: Arms control agreements could require that all missile types that had previously been deployed with MIRVs be destroyed. Any agreement to de-MIRV entirely would probably require additional cooperative measures to supplement verification. It is unlikely that the Soviets would agree unless they see it in their interest. Peacekeeper will provide an incentive for the Soviets to move in this direction.

# NONDEPARTMENTAL WITNESSES

## FORMER CHAIRMAN, JOINT CHIEFS OF STAFF

## STATEMENT OF GENERAL DAVID JONES, U.S. AIR FORCE (RETIRED), FORMER CHAIRMAN, JOINT CHIEFS OF STAFF

### INTRODUCTION OF GENERAL JONES

Senator **STEVENS**. Our next witness is our good friend Gen. David Jones. General Jones spent 40 years in the Defense Establishment. He is a former pilot and tactical wing commander, former Chief of Staff of the Air Force and former Chairman of the Joint Chiefs of Staff, a longtime advocate of maintaining a modern and well-trained conventional Air Force, and supported the B-1 bomber.

General Jones, I am glad to see you back.

General **JONES**. It is a pleasure to be back with you under different circumstances. I find that life can be challenging and rewarding after Government.

### U.S. RECORD ON ARMS CONTROL ISSUES

My first involvement in the strategic field was in the early fifties. I went to the Strategic Air Command and then I became an aide to Gen. Curtis LeMay at the time of the great buildup in SAC and was involved in and listened to the discussions on arms control, the open sky proposals, action of that nature.

I became directly involved personally first when I became Chief of Staff of the Air Force in 1974 in discussions on SALT I, SALT II and continued to be very, very interested and I must say very concerned.

I am sorry to conclude that I think that despite our spending more money, we are becoming less secure every day. In arms control our progress has not been very good for many years. We have not ratified a treaty with the Soviet Union in more than 10 years.

We have been inconsistent and we have had zigzag courses and we throw out new proposals, as we did in 1977, without thinking them through. There is too much political partisanship. I say both parties are too partisan in this issue. In accusing the parties of being partisan, I say ins and outs in all administrations I have been associated with have engaged too much in political posturing.

There is political capital that is expended in a lot of these agreements. Take the Panama Canal Treaty. It is not arms control except in a very indirect sense, but it was a very difficult one, it took a lot of political capital.

I would submit things would be a lot worse in Central America and Latin America today if we had great dissension in Panama where they are acting very moderately today, but that is a different subject.

### APPROACH TO ARMS CONTROL

How we approach arms control. My experience has been in the 8 years I was on the Staff, administrations would come and say what is your position on SALT or START or INF or MFR with almost no discussion of the bigger umbrella of relations with the Soviet Union on the interrelationship in these areas in arms control negotiations, comprehensive test ban, SALT, START, and the rest.

Each agency in the Government then establishes a position and we used to call it negotiating with our own Government and within our own Government. Each agency tends to try to drive that position through and compromise comes out and then too often that position is leaked and the Soviets read about it in the paper and we get an automatic rejection.

One thing that the chiefs called for years ago was a broad overall look, what do we want to try to accomplish in arms control, and tried to establish some principles. What are some basic principles?

### STABILITY

Higher numbers would be bad, would be less stable. Fewer numbers would be good, would be more stable. How to achieve verification, the principles, and then discuss the individual elements of the engotiations and forbid a genesis from developing a position to start with because when they develop a position it tends to be in concrete. Then to have some discussions with the Soviet Union.

Our greatest concern is the Soviet large throw-weight on ICB's. Their greatest concern is the cruise missile. One reasons is that we are ahead in technology in cruise missiles, but also because of the potential for proliferation of cruise missiles. They will get smaller and longer range. It will be hard to tell nuclear from conventional. Third D countries will end up with cruise missiles.

If we could sit down and establish basic principles with the Soviet Union on stability and arms and what is the concern of both sides and then come back and establish our position, not giving in to the Soviets, but a better understanding of their concerns and our concerns and then establish our positions and go forward.

### SOVIET ADVANCE IN MISSILE MODERNIZATION

I agree with Senator Garn in the last decade we didn't have a race. We made some modernization, but essentially it was far greater modernization by the Soviet Union.

I find it strange with the anomaly we have with regard to our strategic forces today, our Trident program now is essentially the same as it was under the previous administration.

The cruise missiles program, not much different. In bombers emphasis on the B-1 with Stealth, with 100 B-1's in production, but with the ICBM's we are 200 and you can debate on survivability, but I believe most of us say they are more survivable than the 100 in the Minuteman holes.

The Pershing II program is the same. I submit there is a bottom line where there is not much difference. The difference is at the margin, but overall strategic capability. This program a few years ago was perceived as one that was making us fall behind the Soviets, opening windows of vulnerability.

Now it is perceived as a massive buildup that will allow us to catch up with the Soviet Union. It has brought critics out of the woodwork of the antinuclear movement, with the bishops, the freeze movement with essentially the same force that we were going to build, which were on the books and approved by the Congress. That was one that had an image of falling further behind.

I think all administrations have made mistakes. I think this one has made some very substantial mistakes, the last one placed too much reliance on arms control, or of thinking that arms control would solve all the problems, and that contributed to some complacency in the country, but the responsibility is very broad.

I think a freeze would be a disservice for a lot of reasons, not so much because we have to catch up, but because of verification and you can't freeze everything.

### RETENTION OF SALT II

I think it also would be very bad to let SALT II lapse. SALT II didn't accomplish much, but even this administration admits they would not do anything that would undermine it. There are some limits on both sides. A lot of things were hammered out that will have to be hammered out again.

I am not just advocating an extension of SALT II, but I think when 1985 arrives we ought to think this through carefully.

In the future we ought to recognize the Soviets will modernize to an equal extent that we do, at least ICBM's, Trident submarines and improved missiles, cruise missiles, bombers about the size of or a little bigger than the B-1.

We will have advantages in technology. They will have advantages in numbers in this modernization program. There will be asymmetries.

In INF we have a division with both sides staking out a position and there are going to be problems as we proceed. I advocate proceeding.

### SUPPORT OF MX COMMISSION ON START

I was deeply involved in the 1979 negotiations. In regard to START, I support the MX Commission's report. I said to the Senate Armed Services Committee if it were purely military with the budget crunch, I would not spend $16 billion on the MX and end up with 140 warheads or even 1,000 warheads.

But I support the Commission because of the arms control and the cohesiveness and need to move ahead and not continue to zigzag. I think we ought to move toward deMIRVing, and warhead count and some sort of builddown. In the builddown proposal we have to take into account somehow the differential in the state of modernization.

I think we have to lower the rhetoric. We have to have good negotiations. I think the administration is sincere in wanting an arms control agreement. I could differ with some of the tactics, but I think they are sincere.

### BIPARTISAN COMMISSION ON ARMS CONTROL

I would support a bipartisan commission. I think we need to take arms control out of politics. I think our agreement should be long term. It should outlast any Presidency, even an 8-year Presidency. They ought to be ones that increase stability and result in fewer forces.

I would not expect to save a lot of money. The ABM Treaty is one cited where we saved money. Yes, we saved money on ABM, but I doubt if the overall defense budget would have been much different.

Under certain circumstances with less reliance on strategic weapons we might have to do more than we are on conventional. I think it would help, but I would not advocate arms control as a method of saving money.

Hopefully we can have some agreement with the Soviets. I think they would be willing if we take into account their concerns and they take into account our own concerns and we have a ceiling and reduction, particularly in warheads.

Thank you, Mr. Chairman.

Senator **STEVENS**. I do not have any questions.

Senator Proxmire.

Senator **PROXMIRE**. General Jones, it is so good to have you as an outstanding military expert testifying on this because it is exactly your kind of views that will be most useful to me and I am sure other Senators.

### COMPREHENSIVE ARMS CONTROL AGREEMENT

As a former Chief of Staff, General, what benefit would there be in a comprehensive arms control agreement limiting or reducing strategic weapons on both sides? What effect would that have on force planning?

General **JONES**. First, one of the advantages of SALT that is overlooked is that it helps us in determining within certain bounds——

Senator **PROXMIRE**. Determining what?

General **JONES**. For example, in SALT II one of the advantages is that it bounded certain things. It did not totally bound warheads, but it bounded certain things. So that when you do have agreement you can in your planning have somewhat greater certainty as to what you can do.

In reductions I would say it depends on how you made the reductions and whether or not the situation was more stable. It certainly can help in planning.

### MISSILE ADVANTAGES A MIXED BAG

Senator **PROXMIRE**. If our top policymakers continually claim the Soviet Union is strategically superior to the United States, does that tend to make the Soviet hierarchy overconfident or more aggressive than otherwise?

General **JONES**. No; because I don't think they believe it.

Senator **Proxmire**. They don't believe that they are strategically superior?

General **Jones**. I think that they see it as I do, as a very mixed bag. In certain areas, throw-weight, megatonnage, clearly they have advantages.

We have advantages of technology. Our allies are better. Where do you end in this analysis? I think that we tend to see all the ills in our forces and, therefore, see the limitations. We don't tend to see the ills in the Soviet forces.

I would think they would see they have certain advantages, they have certain disadvantages, but it would be a murky picture.

### BALANCE BETWEEN UNITED STATES AND SOVIETS

Senator **Proxmire**. You have a perspective as former Chief of Staff and Chairman of the Chiefs of Staff. From that perspective, having retired just last June, do you feel that there is a rough equivalence or rought balance between the Soviet Union and the Uniteds States?

General **Jones**. I think it depends, and I have tried to avoid answering that question because I don't think there is a simplistic answer. It reminds me of the fellow who drowned in a stream with an average depth of 5 feet.

There are certain areas where they clearly have an advantage in intermediate range nuclear forces in Europe. There is no question they have virtually a monopoly in that area. There are certain other areas they have advantages.

We have advantages in other areas. It would be dangerous to assume that we are overall equal and that we don't have great dangers. I am becoming concerned. We are less secure. There are dangers in the days ahead. To say we are roughly equal kind of gives a feeling of complacency because we are unequal in some very important areas.

Senator **Proxmire**. Would you say that they don't have any overall clear strategy superiority over this country?

General **Jones**. I don't think they have any usable strategy superiority unless the west becomes so convinced they are so superior that in our actions we tend to become intimidated.

I don't think from a military standpoint there is a usable strategy advantage. You can analyze if there were a nuclear war between the United States and Soviet Union, they would kill more Americans than we would kill Soviets. To translate that into usable power is something else.

Senator **Proxmire**. Is it your opinion that the Soviet Union, the Soviet General Staff believe they have strategic superiority over the United States?

General **Jones**. I think again it would depend on the definition, if they looked narrowly in the sense of megatonnage and destruction. But I think if they looked at it more broadly, they would see a murkier picture and not a clear advantage to the Soviet.

Senator **Proxmire**. Do any of our allies believe the Soviets are strategically superior to this country?

General **Jones**. It is hard to characterize all of our allies in one bag. I don't know that from all the NATO meetings I drew that conclusion. They tended to have more confidence in us than we had in ourselves.

Senator **Proxmire**. Would you trade our military strategic position for theirs?

General **Jones**. I would trade the SS-20 for what we don't have.

Senator **Proxmire**. I am not talking about specifics. I am talking overall. They obviously would trade for our aircraft carriers, our Navy.

General **Jones**. As my friend, General Vessey, said, they are surrounded by hostile Communist nations. No, I wouldn't trade, but I wouldn't translate that that we don't need to modernize, that there isn't a big problem, because we have different missions, we have different societies. We have a lot of differences.

### CONTACT BETWEEN U.S./U.S.S.R. MILITARY LEADERS

Senator **Proxmire**. You have written there is virtually no contact between military leaders in the United States and the Soviet Union.

What would be the benefit of regularized contacts between the military establishments of both nations?

General **Jones**. First, I would not use it as a basis for negotiations.

Senator **Proxmire**. I am not talking about that.

General **Jones**. As I have written, I think it is almost a tragedy that the first meeting between the senior military was when I met with particularly Marshal Gorkov in Vienna in 1979, the first time since General Marshall met with Marshal Sukov after the world war. It was clear in that meeting that there were misperceptions.

There were feelings on both sides that the other was thinking in a different way. That tended to come out in the conversations. I would just think it would clear up some of the misperceptions. It would not solve our basic problems. I son't mean to be taken in by every word.

You know they are strongly advocating the position of their Government, but there may be some areas that we can explore. I think it should be pushed very, very hard.

Senator **Proxmire**. What would be he specific benefit? Would it help advance arms control if our military leaders meet with their military leaders, understood each other and understood the viewpoints of the other?

General **Jones**. I think so. I would not use those meetings as negotations, but I would think an understanding. We don't take into account the Soviet concerns. That doesn't mean we automatically meet their concerns. But the better we have dialog, the better we can understand the possibilities and the limitations of arms control and, therefore, I would strongly advocate a good dialog take place.

### STRATEGIC ARMS CONTROL/CONVENTIONAL FORCES BUDGETARY TIES

Senator **Proxmire**. Do you think there is a budgetary tie between strategic arms control and conventional forces so that if we reach a strategic arms control agreement, we would have to spend more on conventional forces?

General **Jones**. I will put it another way.

I would say that I do not foresee an agreement that would solve the budgetary problem or that would prompt any substantial reduction in the budget.

Whether we would increase or continue on the projections that President proposed, would be hard to say. But I don't foresee any substantial reduction as a result of any arms control possibility. At best, at the margin.

### SOVIET POLICY IN ARMS CONTROL NEGOTIATIONS

Senator **Proxmire**. Do you think that the leaders in the Soviet Union are committed to a policy of reaching an arms control agreement with this country on the basis of mutual restraint instead of seeking unilateral advantage?

Do you have a feeling they are interested in unilateral advantage or are they seeking arms control?

General **Jones**. My guess, although they are more monolithic than we are, from what I understand from conversations is there is a range of views in the Soviet Union, not as broad and as extreme as in our country, but a range of opinions, there is a good possibility of getting arms control.

I think there is a range, even though it is narrower in view than in our country. I think it is a possibility to achieve an agreement with the Soviets.

Senator **Proxmire**. One final question.

### CONTRIBUTION OF U.S. MILITARY LEADERS IN ARMS CONTROL NEGOTIATIONS

Do you feel that our military leaders have enough voice and enough say in the negotiating position of our country in arms control?

General **Jones**. It is one area where the administration needs the Chiefs and, therefore, you tend to have greater opportunity to express views.

In SALT II many of our views were accepted, many were not. At the bottom line we would have liked a better treaty. We considered it modest but useful.

In arms control we tended to have more of a voice than in many other areas.

Senator **Proxmire**. Do you feel that the military leaders are having enough influence now?

General **Jones**. From the best I can tell, I think they are deeply involved.

Senator **Proxmire**. Thank you.

Senator **Garn**.

### STATUS OF U.S./U.S.S.R. NEGOTIATIONS

Senator **Garn**. General, I agree with much of what you have said today. I am a little bit puzzled though. You made a comment that we had not signed an agreement with the Soviet Union in 10 years.

General **Jones**. Ratified.

Senator **Garn**. Without any regard to the shortcomings of these treaties, that doesn't mean to indicate that we shouldn't have a treaty for treaty's sake without regard to substance?

General **Jones**. I was not implying that. It is just that the two nations have not made major progress in negotiations. I am not trying to say whether we could have or not. It is just the fact that the relations between the two negotiating partners have not been successful at best.

Senator **Garn**. Would you think any of the reasons for that success is because the Soviet Union has wanted to have a massive buildup before they agree to anything, reach levels of superiority before they would agree to a treaty that would lock in place advantages for them?

General **Jones**. It is hard to tell what is in the Soviet mind. They tend to consider at times their force with less capability than they have, at other times probably more. They might see the situation is balanced today. I don't know what they see.

Clearly they knew they were behind and, therefore, would want to catch up before they started with any negotiations. Maybe they wanted to get ahead before they started.

Senator **Garn**. It is understandable they would want to catch up, but they continue to go far, far beyond what is necessary to catch up.

You may remember you and I spoke at a meeting on the House side several years ago. You were asked a question at that meeting about the Joint Chiefs of Staff's threat assessment over the years.

### UNDERESTIMATION OF SOVIET STRENGTH

The question was in the tone that the Joint Chiefs and Department of Defense were constantly yelling the Russians are coming, the Russians are coming, and every year you came up with an assessment that was far beyond the reality in order to promote higher defense expenditures on the Hill.

Your response to that question was that as a matter of fact it was just the opposite, the Chiefs and the Defense Department had underestimated the Soviet threat year after year and if those people who were making that comment would go back and look at that threat assessment and what we thought the Russians would achieve at a certain period of time, not only had you not been yelling the Russians are coming, but the fact was that you had greatly underestimated the Soviet buildup.

I assume you still feel the same way, that there has been over the last couple of decades an incredible buildup and the Defense Department has understated, underestimated, the growth of the Soviet buildup?

General **Jones**. Senator Garn, that was before we built a defense consensus. I think there is a greater recognition now in the country that the Soviets were embarked and are embarked on a massive buildup.

So there is greater recognition in the country now. There had to be in order to build that defense consensus.

Senator **Garn**. I think there is a greater recognition. I still think it is down played. Many of the points you have made are also very important, that none of the weapons systems we are talking about today are new, originated by the Reagan administration.

You became Chief of Staff of the Air Force when I became a Senator. We are still arguing about the same weapon systems. That is 9 years ago.

So, that gets back to my point in my opening question, we are still arguing about the same things and yet Reagan is the scapegoat for all this massive buildup and 9 years ago when I entered the Senate there were these same discussions, MX, B-1.

General JONES. That is the point I was trying to make, there is a great misperception. To be fair, I think it was a misperception 3 or 4 years ago that our programs were so inadequate we were falling behind and everything was going to pieces.

I think there is a misperception today that we are in a massive buildup, we have all these new strategic programs, we are going for strategic superiority. So, I think there is misperception on both sides. I am saying it is more down the middle.

Senator GARN. As far as the misperception, you are correct.

As far as our response, we will have not deployed any of the weapons systems you and I and others were talking about 9 years ago while the Soviet Union has deployed SS-17's, SS-18's, SS-19's, SS-20's, submarines, all sorts of new aircraft and everything else.

General JONES. We have a few cruise missiles, a few subs, but I think your point overall is correct.

Senator GARN. They are not all in operation.

General JONES. The first squadron is in operation, I understand. I think my point is maybe one that I have not articulated too well over the years.

My concern is that our strategy is up here. Before it was here, it is now here. If we had total coherence in the sense of budgets and programs and cost estimates, there would be a great differentail between what we want to achieve in strategy and what those dollars provide.

But we underestimate the cost of systems, we don't have a good integrated program. We end up with a big Army we can't move because of lack of airlift. We neglect other areas.

I submit we get $3 worth of capability out of $4 in the budget. Therefore, I think we have major opportunties.

I think there is an opportunity to increase our capability very substantially. I don't mean nuclear superiority to the Soviet Union.

Senator GARN. I agree with you. But why are we only getting three for four, to use your figures? Mainly because of delay and stretchout.

If we had built a B-1 when we should have, back when Gerald Ford was still President, if he had been willing to make that decision, you would have 200 of them flying at far lesser cost.

If we had made a decision on MX back in 1976 even before the Carter administration, that had been the pattern. If people would do a little more serious study, as I was trying to indicate before.

### U.S. BOMBER FORCE

The debate on the B-52 was that it should not be built, the B-47 was a perfectly adequate airplane to carry us and the B-52 was a waste of money because it was an interim bomber and, therefore, we should not build it. Thirty years later that is all we have.

Now we have the same argument, build the Stealth. Maybe we should build the Stealth, but there is a whole pattern of this Congress for political purposes continually starting and stopping and sputtering, notwithstanding the advice of you or other members of the Joint Chiefs of Staff or several Joint Chiefs of Staff.

I believe it has been primarily a political problem and the waste of money comes because these bodies set a level. you don't set a defense budget by 5 percent or 7 percent. You have to do it on the basis of threat and the need. You ought to get on with it.

What will happen, in my opinion, is that we will continue to go the same way with political pressure. If we stop the B-1 and MX, do you think we will get a Midgetman? I doubt it.

The same people who oppose it will continue to oppose it. They have been very successful for 20 years. That is why we have not modernized and replaced and why there is a great deal of waste because of stretchout and because we are not willing to go to multiyear procurement.

I believe we can save 25 to 30 percent in procurement costs just by going to multiyear. Stop these overruns caused by Congressmen and Senators who cut if off here and 3 years later we restart it and then we cut it off and restart it.

It is a most inefficient way to produce anything. You would have to set private sector work on that basis.

General JONES. I said a Member of Congress, in my judgment, was being irresponsbile when he criticized the Defense Department without recognizing that the Congress is about half the problem. I say only half the problem.

Senator GARN. You are more generous to the Congress than I am.

General JONES. No. I think the responsibility is shared in the administrations, and I put that in plural, this administration and previous administrations. I think it is in the military with the services coming up with expensive programs that cost more, even if they are on schedule less than if they are slipped. I think there is a shared responsibility.

Senator GARN. General, I agree with you. It is a matter of where the share need go. On noncontroversial weapon systems like the F-16 and programs that are not controversial at all because of the number, we mandated for production, cutting down the assembly line, cutting off the subcontractors, laying off people, there is an incredible waste even in procurement of noncontroversial weapons systems.

We have to move on. Let me make two other comments.

I would agree, I will answer Senator Proxmire's question, overall I think there is roughly equivalence and parity, whatever catch word you want to use, but I can't believe with your backgrond and experience that you would not have to define, even though the fact is we have overall parity, if everybody starts shooting everything all at once, that is not the way warfare works.

I don't have nearly the experience you have had by a long shot, but isn't the SS-20, as you said, incredibly destablizing when you have a disparity there, an advantage of that kind in the European theater of now over 320 to zero?

What does overall parity mean when you have given, that kind of incredible advantage in that theater?

General JONES. I agree. I have said they have essentially a monopoly in the INF system in Europe. I go back to my analysis of the 5-foot stream. There are great dangers and that is one of them in the INF balance in Europe.

### EXCERPTS OF ARTICLE ON NUCLEAR FREEZE

Senator GARN. Time is running. Let me quote from an article you coauthored, Can We Be Secure with A Nuclear Freeze?:

> The two most prominent proposals currently being expounded—a declaratory policy of "no-first use" of nuclear weapons and a total freeze on nuclear weapons—have a very seductive appeal to those who are frustrated with the lack of progress in controlling nuclear arms.
>
> The no first use proposal fails to account for the conventional force imbalance.
>
> Paradoxically, then, a declaratory policy of no first use may well lead to the very outcome its proponents seek to avoid—an increased likelihood of conflict and escalation to nuclear warfare.
>
> The more we talk about refusing to use nuclear weapons, the greater the danger that we may create incentives for conventional aggression and even preemptive nuclear attack.
>
> Serious analysts of strategic nuclear force capabilities can honestly debate whether we have rough overall parity with the Soviets today or whether the Soviets have moved ahead—and there are facts supporting both sides of this debate.
>
> But there is no question that the momentum is with the Soviets and that their systems are more modern and less vulnerable than ours. And there is no quarrel with the fact that the Soviets have a major advantage in intermediate nuclear systems, especially with their widespread deployment of the SS-20s contrasted with our yet to be deployed ground-launched cruise missiles and PERSHING IIs.
>
> A total freeze would bring arms control negotiations in Geneva to a halt and undermine President Reagan's proposal for zero intermediate range nuclear forces in Europe.

I would ask unanimous consent that the entirety of this article written by General Jones be placed in the record because I think it is a very thoughtful and serious article.

General JONES. I stand behind every word I had in there. I think it is consistent with what I have said today.

Senator GARN (presiding). Senator Proxmire.

Senator PROXMIRE. No questions.

Senator GARN. Thank you very much, General, we are happy to have had you.

General JONES. Thank you.

[The information follows:]

# A total freeze would bring arms control negotiations in Geneva to a halt and undermine President Reagan's proposal for zero intermediate range nuclear forces in Europe.

he frustrations of living with—let alone dealing with—the risks of nuclear confrontation are being manifested in a renewed groundswell of anti-nuclear sentiment which gained strength first in Europe and now in the United States. This movement cannot be dismissed as the emanations of a fringe element—it is drawing increasing numbers of very serious-minded concerned citizens.

As one who has been deeply involved with strategic nuclear weapons for more than 30 years and has analyzed many times how devastating and likely uncontrollable a nuclear war would be, I sympathize with their concerns. The last four years have been particularly sobering, for I have been the person who would implement any presidential orders to use nuclear weapons.

If we are to find the way to address these very serious concerns, we need to reflect on how we got where we are. In the World Wars, we were afforded the time to mobilize our great industrial base by the buffers of geography and allies who could fight until we arrived. We could recover from mistakes which left us less than adequately prepared; we had time to build and deploy our forces, and with our superior resources, outequip and outman the enemy. We finally won those wars largely through overwhelming mass and attrition rather than farsighted preparedness.

After World War II, we took a different approach based on our nuclear superiority and our desire to return to a peacetime economy. We placed primary reliance on the "nuclear umbrella" and literally decimated our conventional capabilities in the rush to demobilize after nearly four years of exhausting war. As a result, we were once again caught unprepared and almost pushed off the Korean peninsula by a third-rate power. But while we discovered that nuclear weapons were not effective for deterring all levels of conflict, massive retaliation remained the keystone of our strategy.

It was not until the 1960s that we responded to this lesson by developing the strategy of flexible response which was officially adopted by NATO in 1967. Rather than a trip wire to trigger a nuclear response, conventional forces were considered the first line of defense in a measured response to a Warsaw Pact attack. Strengthened conventional forces, theater nuclear weapons, and United States long-range strategic weapons—the NATO Triad—provided a more flexible deterrent through the capability to escalate as necessary to meet any level of threat. The threat of escalation remains NATO's strongest deterrent today.

It has proven amazingly successful in preventing direct armed conflict between East and West—two societies with such depth and breadth of differences. Historical precedents of neighboring alliances with such differences would have caused one to predict a major conflict during the 37 years since the end of World War II. Yet, over the years there has been skepticism of the deterrent role of NATO strategy and proposals have often been made that would weaken the NATO Triad.

The two most prominent proposals currently being expounded—a declaratory policy of "no-first use" of nuclear weapons and a total "freeze" on nuclear weapons—have a very seductive appeal to those who are frustrated with the lack of progress in controlling nuclear arms. They have captured the imagination of many serious people. But I think the premises on which these proposals rest are wrong. I will try to explain why I believe so as clearly as possible.

The no first use proposal fails to account for the conventional force imbalance. Although there is an understandable debate as to how great a margin of superiority the Warsaw Pact has in conventional forces—and I for one believe that the margin is often overstated—I know of no serious analyst in the West who does not conclude that one exists. If in a political crisis the Soviets believed that they could launch a successful conventional attack against NATO without fear of a possible nuclear response, their incentive to do so—and thus the probability of armed conflict—would be greatly increased. And we have to bear in mind that developments in the Soviet empire could compel their future leadership, which might be even more aggressive, to externalize their internal economic and political crises.

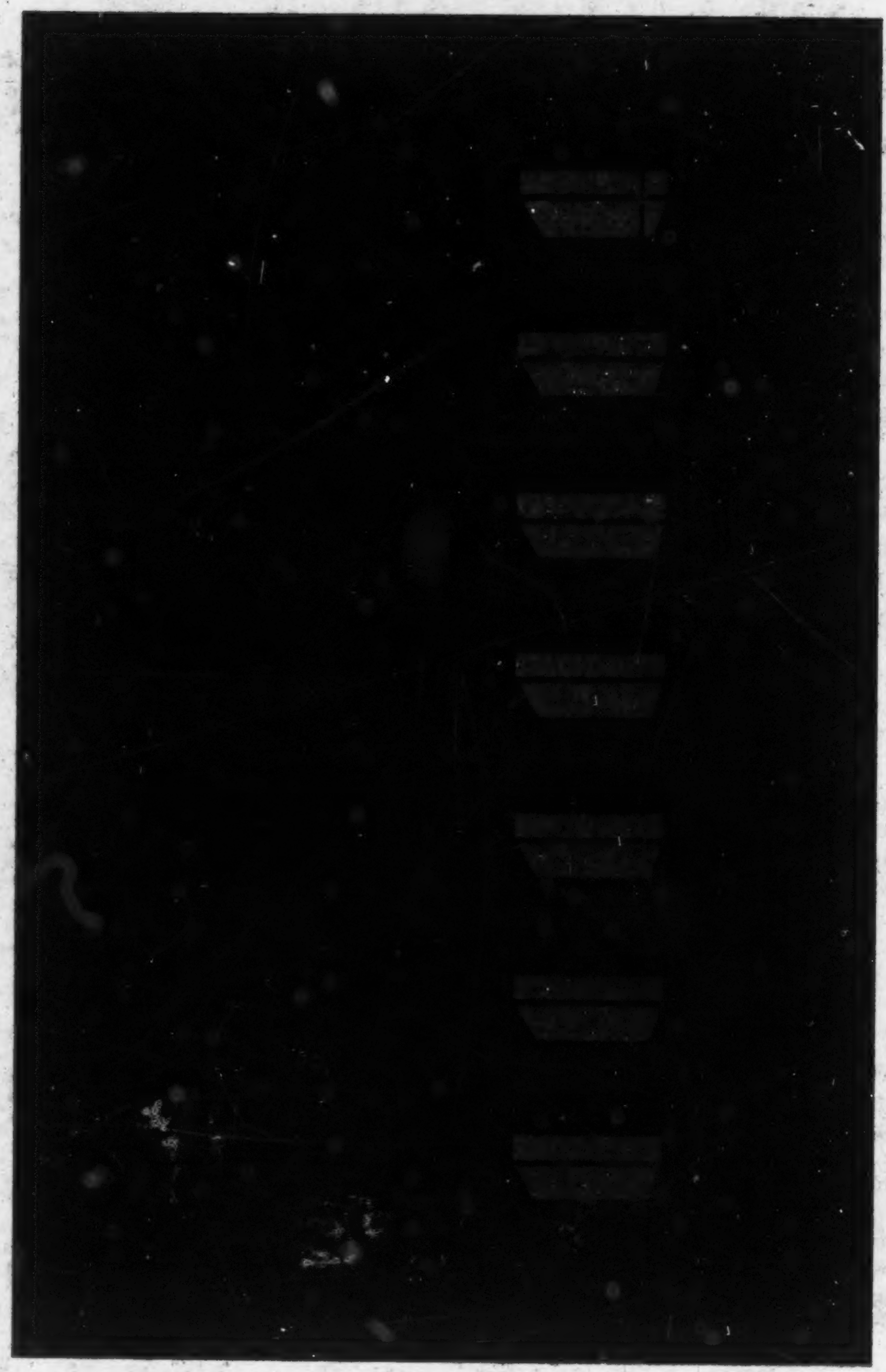
Furthermore, it is unreasonable to expect that promises made with cool reason in peacetime will be kept in the heat of battle when a nation is threatened with military conquest. Either a defensive nuclear response to conventional attack or a preemptive nuclear strike by the aggressor would still remain possibilities regardless of declaratory policies. Paradoxically then, a declaratory policy of no first use may well lead to the very outcome its proponents seek to avoid—an increased likelihood of conflict and escalation to nuclear warfare.

Since we must expect that a nation will use whatever means it has available to counter a threat to its very survival, the key to preventing the use of nuclear weapons is to deter armed conflict between the East and West at *any* level. The critical threshold is the beginning of combat. Rather than a declaratory policy of no first use of nuclear weapons, therefore, NATO has a more comprehensive policy of no first use of military force.

As President Reagan stated last November, "No NATO weapons, conventional or nuclear, will ever be used in Europe except in

**General David C. Jones, USAF**

*Prior to his appointment as Chairman of the Joint Chiefs of Staff in June 1978, General Jones served four years as Chief of Staff of the US Air Force and concurrently was a member of the Joint Chiefs of Staff. Earlier, he was Commander in Chief, US Air Forces in Europe, and Commander of NATO's Fourth Allied Tactical Air Force. He entered the Army Air Corps in 1942 to begin aviation cadet training and received his commission and pilot wings the following year. He retired from active duty effective July 1, 1982.*



**response to an attack." I am confident that we can and will adhere to this much more effective non-aggression policy. It is a far more credible and workable policy than a promise not to use nuclear weapons after an attack has begun.**

**The more we talk about refusing to use nuclear weapons, the greater the danger that we may create incentives for conventional aggression and even preemptive nuclear attack. We can assure peace only by maintaining our strength and presenting the Soviets with an uncertain and ambiguous situation. This is not a very comfortable posture for us to maintain, but it is a fact of life that is essential for maintaining deterrence.**

**The second proposal, which calls for a total freeze on the** development and deployment of nuclear weapons, unfortunately, is also flawed. Serious analysts of strategic nuclear force capabilities can honestly debate whether we have rough overall parity with the Soviets today or whether the Soviets have moved ahead—and there are facts supporting both sides of this debate. But there is no question that the momentum is with the Soviets and that their systems are more modern and less vulnerable than ours. And there is no quarrel with the fact that the Soviets have a major advantage in intermediate nuclear systems, especially with their widespread deployment of the SS 20s contrasted with our yet to be deployed ground-launched cruise missiles and Pershing IIs.

A total freeze would bring arms control negotiations in Geneva to a halt and undermine President Reagan's proposal for zero intermediate range nuclear forces in Europe. The ruling Socialist party in Germany represents people living virtually under the guns who have expressed deep concerns about nuclear weapons. Yet given the current balance, it should come as no surprise that the party membership backed Chancellor Schmidt and rejected a total freeze by a wide margin.

Furthermore, a total freeze would continue—and very likely exacerbate—the already serious vulnerabilities of many of our strategic systems. The Soviets have essentially completed major modernization programs while we are still living off the investment of the 1960s. By incorporating the latest technology in their new systems, they have achieved greater accuracies for larger numbers of warheads—the very characteristics which have raised the vulnerability of our land-based Minuteman missiles far beyond that of Soviet intercontinental ballistic missiles. We rely more heavily on strategic bombers than do the Soviets. A freeze would not prevent their continuing to improve air defenses and thus make it increasingly difficult for our bombers to penetrate.

We must also remember that verification is the most important element of arms control—and verification of a complete freeze would be extremely difficult. **It would be sheer folly for us to enter into any agreement which did not include very stringent and workable stipulations to verify compliance.**

**Our goal remains the prevention of war. Vulnerabilities which undermine the strategic balance are destabilizing and thus the most critical factor in maintaining deterrence. So again we are left with the paradox that a proposal intended to avoid nuclear war could actually increase its likelihood.**

**I make these points not as an argument against arms control but**

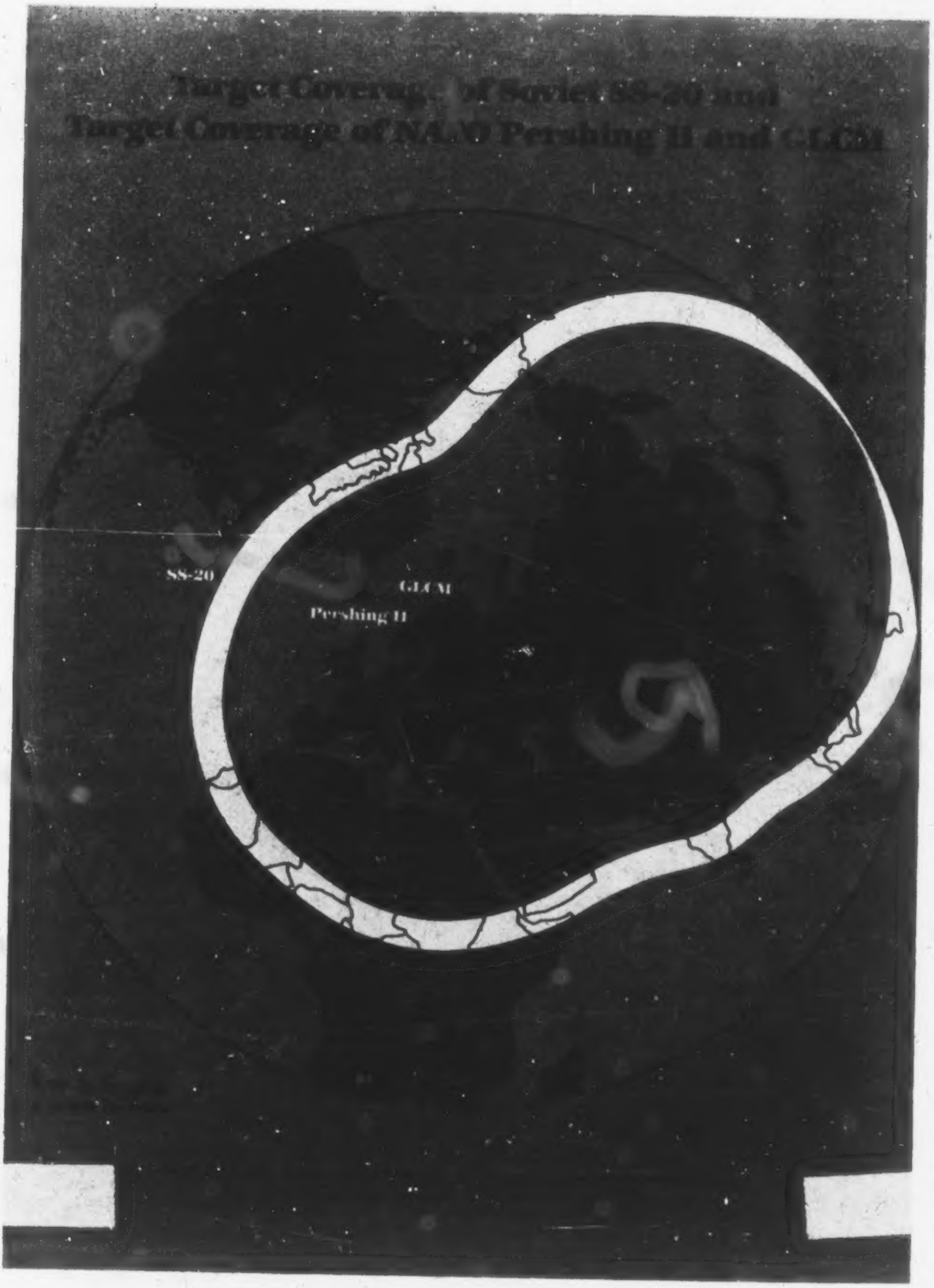
to emphasize that there are no quick and easy solutions to such complex problems. I want to make it unmistakably clear that the Joint Chiefs of Staff are 100 percent behind equitable and verifiable arms reduction agreements. I am personally convinced that this is the only path toward a more secure future—a goal to which I have devoted 40 years of my life. I have participated in very intensive discussions in the National Security Council where the President and the principal national security advisers have studied the complex issues that had to be addressed if we are to achieve significant nuclear arms reductions. We have worked very hard on proposals which are in the best interests of all concerned.

*The challenges that face the Free World in the 1980s are severely compounded by the spectre of an unremitting Soviet military buildup and most particularly their drive toward nuclear superiority.*

But I am convinced that the Soviets will seriously consider substantial arms reductions only if they believe that they cannot achieve their goals by other means. They have shown unrelenting determination to achieve superiority across the board even though their military buildup severely compounds their very serious economic problems. They have taken advantage of every opportunity to foster political divisiveness within the NATO Alliance.

We must convince the Soviets that they are on the wrong track, but this will be difficult unless we can establish a better basis for communication with them—not just talk at a negotiating table but true communication in every available forum. There has been too much misunderstanding and too little exchange between the United States and the Soviet leadership over the past 37 years. There has been even less exchange on a military-to-military basis than there has been at the political level. The only time that the top military leadership of the two countries have met since immediately after the war was at the 1979 Strategic Arms Limitation Treaty talks in Vienna where I met with Marshal Ustinov and Marshal Ogarkov.

I believe it is essential that we open a true dialog between our military leaders and those of the



Target Coverage of Soviet SS-20 and Target Coverage of NATO Pershing II and GLCM

Soviet Union—not to negotiate, but to get a much better understanding of each other's goals and to clear up any serious misperceptions on each side. It has been difficult to find an appropriate time for such initiatives—the Afghanistan and Poland situations have not helped—but we should attempt to break the ice as soon as the atmosphere is right.

The problems of countering Soviet power would be difficult enough, but they are greatly compounded in a world characterized on the one hand by increasing economic interdependence and on the other hand by reemerging tendencies toward social and political fragmentation. There is a resurgence of nationalism in many regions, religious and ethnic conflicts are reemerging, more and more factions are resorting to terrorism on an expanding scale, and old territorial disputes are becoming more difficult as evidenced by the Falkland Islands.

After the Second World War there was great recognition of the need for Western nations to act in unity, and there were many leading proponents of internationalism. But the voices of internationalism are largely muted today.

The United States provided the leadership and the resources to build a new framework of cooperation after the war, but there remains a latent isolationist streak in this country despite the enormous degree of economic and political interdependence of today's world. Once again we are hearing calls to pull American troops out of Europe and reduce our support of Japan. This growing movement is based primarily on frustration with the relative inadequacy of allied defense efforts, concern over East-West trade policies, the building of the natural gas pipeline from the Soviet Union, and the feeling that we are more involved than our allies in "their" defense. These concerns have been raised very emphatically in recent Senate hearings.

The frustrations being voiced are understandable, particularly in light of our own budget "crunch," but it is my strong belief that a move toward withdrawal would be totally counterproductive. As a threat, it is likely to result not in increased defense spending by our allies but in greater accommodation with the East—an outcome not in our best interests. And if we carried out such a threat, the immediate effect would be to greatly weaken NATO's conventional capability.

Again we have a paradox. At a time when there is a growing movement to reduce reliance on nuclear weapons—a course which requires greater reliance on conventional forces—there is another movement building which could end up reducing NATO's conventional capability through withdrawal. The Europeans might see only one course open to them under these circumstances—and I don't think the West needs another lesson on where accommodation can lead.

Clearly we should continue to work hard to have our European Allies, as well as the Japanese, increase their defense efforts. But it should be done in a way that strengthens relations rather than exacerbates differences. Furthermore, we need to recognize that our troops are in Europe primarily to defend the interests of the United States. A forward defense is far better than one which begins at waters edge, particularly in an age where technology has greatly shrunk the factors of space and time.

## NATO/WARSAW PACT COMBAT AIRCRAFT IN PLACE IN EUROPE

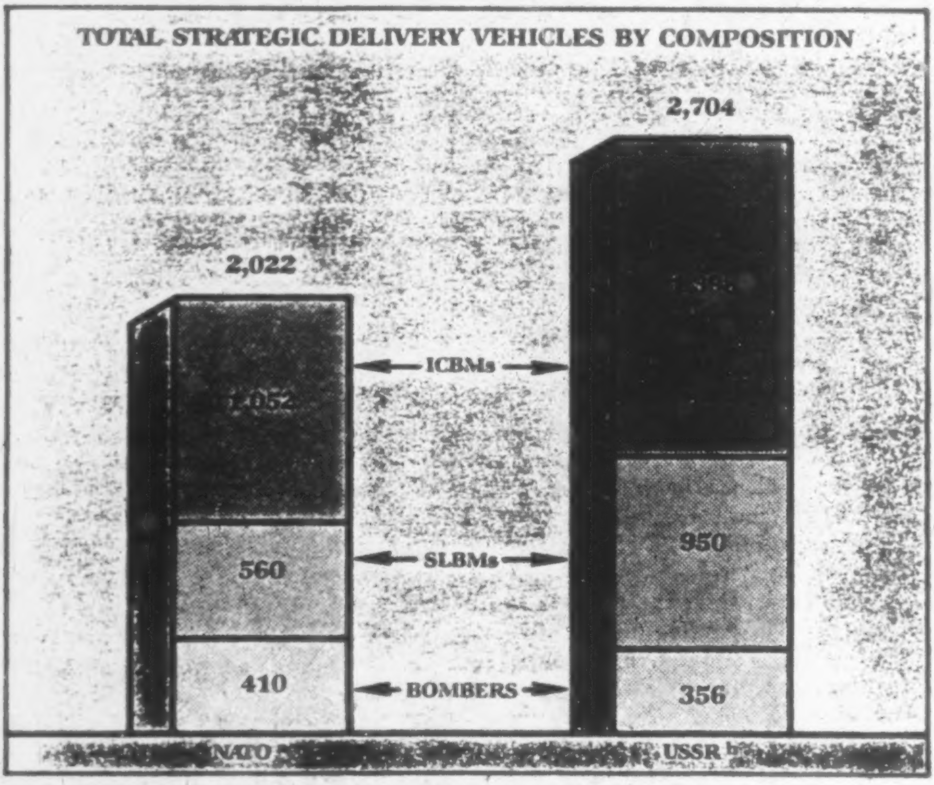
| | Fighter-Bomber Ground-Attack | Interceptor | Reconnaissance | Bombers |
|---|---|---|---|---|
| NATO | 1,950 | 740 | 285 | — |
| WARSAW PACT | 1,920 | 4,370 | 600 | 350 |

N.B. Many interceptors can be used in ground-attack roles.

French forces are not integrated in the NATO military structure and are not included in the above chart.

From the NATO publication "NATO and the Warsaw Pact — Force Comparisons."

## Total Strategic Missiles and Bombers



(a) NATO figures include United States strategic missiles, 64 British strategic POLARIS SLBMs and United States B-52s and FB-111s. The United States-based FB-111 is included because it has a strategic mission.

(b) USSR figures include Soviet strategic missiles and BEAR, BISON, and BACKFIRE bombers: the BACKFIRE bomber has been included in this figure because it has an inherent intercontinental capability although in its maritime and European land-attack roles it poses a serious threat to NATO Europe.

French forces are not integrated in the NATO military structure and are not included in the above chart.

From the NATO publication "NATO and the Warsaw Pact — Force Comparisons."

We cannot ignore the fact that we do have some fundamental differences with our European Allies. For example, they saw "detente" through far different lenses than we did. They saw many benefits, such as a lessening of tensions in Europe, increased East-West commerce, and a loosening of restrictions on contacts. We saw the same period as a time of a major Soviet military buildup helped by the flow of technology while the West relaxed its guard—and as a time when the Soviets took control of Angola and Ethiopia through their Cuban proxies and invaded Afghanistan with their own forces.

NATO has traditionally drawn its strength from overriding mutual defense interests in spite of the diverse interests that will always exist among free nations. We must not allow those differences to so cloud our vision that we lose sight of our common goal, nor should we consider every disagreement a critical test of the fate of the Alliance.

The United States and NATO face many challenges today, but we often tend to forget that the Soviet Union and Warsaw Pact have far more serious problems that are even more difficult to solve. Their economic system is in shambles, they have persistent agricultural shortages, and their social structure is presenting increasing difficulties. They are beleaguered by the situations in Afghanistan and Poland, and they have few true friends around the world. Someone once said the Soviet Union is the only nation on earth almost totally surrounded by hostile communist nations. We cannot afford to ignore the risk that the Soviets—particularly with the likelihood of their next leaders being even more aggressive—might attempt to solve or divert attention from their internal problems by resorting to aggression.

Expanding Soviet capabilities to project power to many unstable regions have forced upon us the need for a global strategy and for forces capable of deploying rapidly to regions where we cannot afford to ignore threats to our interests. We cannot meet the challenges of an increasingly dangerous world and position ourselves to negotiate meaningful arms reductions unless we demonstrate the willingness to invest the necessary resources to make up for the deficiencies created by the relative neglect of defense investment in the 1970s.

Our military investment and force readiness needs are great, and I urge strong support of the defense budget. While the MX, the Trident and advanced strategic bombers are expensive systems, our strategic forces nevertheless account for only 15 percent of the overall defense budget—a price well worth their deterrent value. And our conventional deterrent must also be improved by investing in the strength and readiness of our air, land, and sea forces and our ability to project those forces rapidly to areas of conflict.

There is no inconsistency, as some would have us believe, between our sincerity in seeking meaningful arms reductions and our determination to modernize and expand our forces. Our goal is security—the avoidance of war, immunity from intimidation through the threat of force, and the strength necessary to defend ourselves and our allies should deterrence fail. Our preference is to achieve that goal at the lowest necessary level of potential destructiveness. But we cannot afford to abandon our national security goals. Our only alternative, therefore, is to convince the Soviets that mutual arms reductions are in their interests as well as ours. ■

## THE BROOKINGS INSTITUTION

### STATEMENT OF MR. RAYMOND GARTHOFF, BROOKINGS INSTITUTION

#### INTRODUCTION OF WITNESS

Senator **GARN**. May we have Raymond Garthoff of the Brookings Institution come up, please.

Senator **PROXMIRE**. I understand, Ambassador Garthoff, you are a retired foreign service officer. You have been an arms control negotiator. You specialize in Soviet foreign and military affairs.

Mr. **GARTHOFF**. Yes, sir.

Senator **PROXMIRE**. Also in addition to a variety of assignments in the State and Defense Departments, in 1962–1964, Eighteen-Nation Disarmament Conference, and 1962 NATO Ministerial Conference and negotiations leading up to signing of SALT I. You have written a great deal on the subject of Soviet defense and foreign policy including recent books on Soviet atrategy and Soviet military thinking.

Right now you work with the Brookings Institution; is that correct?

Mr. **GARTHOFF**. Yes.

First of all, let me apologize. I have caught a spring cold.

I might also say in addition to my assignments with arms control which were mentioned I have served for many years as Deputy Director of the Bureau of Political-Military Affairs in the Department of State and in our mission to NATO and have served as well in a number of defense-related positions other than those concerned with arms control.

#### U.S. SECURITY SERVED BY ARMS CONTROL

Mr. Chairman, the principal purpose of arms control can only be to serve the security interests of the United States. Arms control agreements can, however, serve American security in a number of ways:

Enhancing our military security through contributing to deterrence stability, strategic stability, arms race stability, and crisis stability;

Contribution to improved political relations with adversaries, and with allies;

Reducing the ever-mounting economic costs of an unconstrained arms competition.

The objectives of arms control could be refined and spelled out in much greater detail, but my intent is simply to recall at the outset that arms limitations and reductions, and other forms of arms control, can serve important military, political and economic purposes.

#### ARMS CONTROL MEASURES

Some arms control measures may serve several or all of these objectives. In some cases, however, it may become necessary to weigh one against another. In doing so, serving political aims of relaxing tensions and improving relations, or pursuing economic savings, should not be purchased at the expense of military security.

On the other hand, military security is not identical with national security, and it is appropriate and necessary in reaching decisions to weigh all three basic factors (as well as other considerations such as maintaining a domestic political consensus, and the impact of various arms control advocacies or agreements on foreign public opinion).

Achievement of negotiated arms control presupposes a readiness by the other side to reach agreement and to abide by any agreement reached. That, in turn, requires that both parties see their interests served by agreement—better served by arms control than without it.

An arms control agreement must be negotiable. The best arms control proposal in the world is not going to serve these basic purposes unless it is agreed, so unless one's purpose is to win a propaganda contest, it serves no useful purpose to advocate proposals which appear best because they are loaded to our own advantage, or which may appear fair to one's own constituency but not to the other side, or even those which advocate more far-reaching reductions than the traffic will bear, if the only real result is to preempt and preclude the offer of negotiable proposals and the opportunity for real negotiation and possible agreement.

I do not mean by this pursuit of agreements for their own sake or that we should make any agreement not in our best interests.

There are, of course, also questions of tactics and bargaining involved in presenting proposals and negotiating agreements, but for our present purposes I shall pass over them.

### PAST ARMS CONTROL EXPERIENCES

As we consider the present situation, it may be useful to recall briefly some aspects of past arms control experience which have a bearing on the situation today.

What, of current relevance, can we learn from SALT I?

First, that even at a time of some tension and mutual suspicions, it proved possible for the United States and the Soviet Union to agree to strategic arms limitations—effective and lasting limitations in the case of the ABM Treaty.

We tend to think of SALT and détente as having gone hand in hand, but in fact the détente in American-Soviet relations of recent memory was only launched (albeit with considerable fanfare) at the first summit meeting of President Nixon and Brezhnev in May 1972.

The SALT I negotiations took place from 1969 to 1972 during the war in Vietnam, a muted confrontation over basing Soviet submarines in Cuba, two Middle Eastern crises between Syria and Jordan and between Israel and Egypt, and shortly after the Soviet occupation of Czechoslovakia—yet neither side permitted these sharp differences to blot out the fact that despite persisting conflicts of interest in many areas there was a shared interest in arms control.

Arms control is, after all, only needed between adversaries—if we were friends, there would be no mutual fear and suspicion, no arms race.

### VALUE OF ABM TREATY

In my judgment, and that of many other observers, the ABM Treaty has in fact served all three of our basic interests.

It has made far more predictable and less intense the arms race in strategic weapons,

It served a useful political role at the time, and

It curtailed what would otherwise almost certainly have been a very costly ABM arms race and contributed to reducing the offensive arms race.

The arms control ABM Treaty is an example of the way arms control can help to provide some predictability and limit on our projection of future Soviet forces. It is not a negligible consideration, although, as Mr. Perle has stressed, it is not a simple matter to determine.

When the SALT talks began in 1969 our official estimates were that the Soviet Union would probably have some 500 to 700 ABM launcher interceptors soon and might have 5,000 to 9,000 deployed in 1970 providing a nationwise defense system.

While we must continue prudently to consider possible Soviet departure from treaty limits over the past decade, we have been able to plan with considerable confidence on the limit of only 100 launchers/interceptors at Moscow.

This kind of agreement can thus facilitate our own military programing with possible major contributions to reducing the costs of defense as well as enhancing military security. Depending upon the context of other developments, it might contribute to improving political relations, but that may not always be the case.

### STRATEGIC OFFENSIVE ARMS AGREEMENT FAILURES

The SALT I Interim Agreement on offensive missiles, and the SALT II Treaty even had it been ratified, despite their merits did not, however, effectively curb the strategic offensive arms race.

Rather than fault arms control for that failure, I would fault both the United States (under several administrations) and the Soviet Union for failure to carry arms control far enough. I do not believe we placed too much attention on arms control.

In particular, the failure to ban MIRV's, which I believe could have been agreed in 1969-70, is now generally recognized to have been responsible for the destabilizing effects of making ensiloed ICBM forces vulnerable. Only now are we striving to devise complex and costly ways to undo in the 1980's our costly MIRV'ed missile deployments of the 1970's. This could all have been avoided by a MIRV ban in SALT I.

Incidentally, if it were not for the constraints of the ABM Treaty, we could not now contemplate turning to single warhead missiles.

I would like to interject a comment on Secretary Pearle's comment earlier about the decrease in the number of American nuclear warheadsover the last 20 years and Soviet increase during that period.

## U.S./SOVIET MISSILE BUILDUP

It is true that the United States decreased by some 8,000 warheads and reduced megatonnage by one-fourth, mostly, by the way, in the late 1960's before SALT. The main reason was that we shifted our whole force from something relying on 1,700 B-47 and B-52 bombers at that time. Part of the reason was a turn to smaller bombs to permit low-level delivery, and also the shift from bombers to missiles in our force. These were, of course, all unilateral cutbacks not mandated by arms control agreements.

The Soviets have indeed been increasing their nuclear forces considerably. The Soviet buildup from 1967 to 1972, when the SALT I Interim Agreement did put in a limit, that is during the time the SALT I negotiation, was an increase, of 1,050 ICBM and SLBM missile launchers.

This is often called an unprecedented, "relentless" buildup. It is impressive, but not unprecedented, because the U.S. buildup in the previous 5 years, 1962 to 1967, was 1,060 ICBM and SLBM missile launchers.

Finally, after all these decreases in the American nuclear stockpile and increases in the Soviet one, the United States is still well ahead in the overall numbers at the present time and is likely to remain so for the next several years and beyond with the present programs on both sides.

During the 1970's, the arms competition changed from launchers to warheads. During the decade of the 1970's, the SALT decade, the United States added more missile warheads to its force than did the Soviet Union, contributing again to our continuing present superiority.

By the way, I agree with Secretary Perle and Senator Garn that it is more meaningful to concentrate on counting warheads than launchers. I would recall that it was the preference of the United States that we deal with launchers in SALT. It was not something that the Soviets put over on us. It was in fact our preference because we sought a short-term advantage, since we were starting to MIRV our forces and the Soviet Union was not.

## NEGOTIATIONS ON ASAT WEAPONS

Let me take one other case, one in which arms control has been too little pursued, but for which it may not, even now, be too late: A ban on antisatellite weapons.

In 1977, the Carter administration proposed arms control negotiations to ban or limit antisatellite (ASAT) weapons. This was a farsighted move. Such talks did in fact take place in three sessions from June 1978 to June 1979.

Then a fourth meeting planned for early 1980 was put off indefinitely by the Carter administration as part of its retaliation for the Soviet occupation of Afghanistan. That, in my view, was a shortsighted move, especially given the wide range of other measures available, and used, to register American outrage at the Soviet action in Afghansistan.

The present administration has made no move to resume the ASAT talks.

The principal reason for the American initiative on ASAT was a Soviet development program testing an antisatellite satellite/interceptor. After proposing and gaining Soviet agreement to ASAT talks in March 1977, the United States spent a year in launching an ASAT development program of its own, during which time the Soviet tests continued and the Soviet Union was deemed to have acquired a marginal but operational capability.

When the talks were finally scheduled, the Soviet Union unilaterally suspended its ASAT tests through the entire period during which the talks were taking place, until after we abandoned them (that is, from May 1978 to April 1980). Soviet testing then resumed.

The U.S. ASAT system is expected to become operational in 1986, based on a different type of system with greater operational flexibility and capability than the Soviet one. Both will be limited to potential use against satellites in low earth orbit, but in time no doubt both will improve this capability.

### U.S. IMPROVEMENT OF SATELLITE SYSTEMS

The United States is spending literally tens of billions of dollars on a wide range of satellite systems to serve a variety of essential military tasks.

Naval aviation, military communications, improving Earth-based missile accuracies, early warning of attack, and photographic, electronic and communications intelligence collection.

Some of these systems also serve as the most critical national means of verification of existing and prospective arms control agreements. Would it not be prudent to make every effort to head off Soviet acquisition of the means to destroy these satellites through arms control?

The Soviet Union also uses similar military space systems, although it relies upon them somewhat less than we do. But that is essentially irrelevant—except that it helps provide a shared interest in banning ASAT weapons. And the Soviets have been proposing a ban on ASAT, and indeed on all weapons in space.

We might not in any case be able to reach a mutually acceptable and verifiable arms control agreement—but we might if we tried, and we surely won't if we don't try.

I have noted briefly these two examples to illustrate ways in which arms control can serve a variety of interests. Arms control, by definition, means limiting or giving up some military options—but in order to provide military, as well as political and economic, benefits.

It is possible to conceive of arms control propositions which would involve giving up some military option or benefit for a political or economic gain—some might even be worth it. But they would be the exceptions. In general, military benefits are in fact the principal objectives of most arms control.

It may be useful to address a few comments to the subject of verification.

### VERIFICATION

Verification, whether termed "adequate" as the standard used to be, or "effective" as is now the mode, is an important condition for arms control. It is not itself arms control or an objective of arms control.

In some cases, otherwise desirable arms control, if not perceived to be adequately or effectively verifiable, may have to be foregone. Verification is important, and in most cases essential.

In all candor, I must, however, note that sometimes alleged concern over verification has been used as an excuse for opposing arms control measures, or unacceptable verification demands have been made as a spoiler to insure that a proposal made for other purposes is not accepted.

Regrettably, that is what happened in the case of the proposal for a MIRV ban in SALT I in 1970. A requirement for onsite inspection was added to the American arms control proposal for a MIRV ban before it was tabled, and that killed the possibility of negotiating a ban.

I do not know if all those responsible for that decision intended it to have that result, or were even aware that would be the result. But I do know that the decision was made without the benefit of any studies to determine even what onsite inspection could do to verify the ban adequately or effectively, much less that it was needed, and against the considered judgment by most of the agencies involved in the SALT process (including the one principally responsible for verification monitoring) that it was not needed.

It is not my purpose here to reopen old battle wounds, but to illustrate the importance of giving due, but not undue, attention to verification.

In the case of the MIRV proposal, potentially extremely important possibilities for an arms control measure with very high military benefits, and, incidentally, considerable economic and political benefits as well, were squandered. We should not wish to repeat that experience.

### SALT I BARGAINING

In concluding I would like to make two brief comments on points relative to this session which Secretary Perle raised with respect to two outgrowths from the SALT I experience.

One has to do with the SS–19. Just for the record, having been involved, I would like to make clear that we knew that the Soviets were planning to build larger missiles. From other evidence as well as the fact that they simply refused to agree with our proposal that we define light ICBM's as being the size of the SS–11, it was quite clear to the negotiators that the Soviets in fact had in the works a larger missile and that is why they wouldn't accept on proposed limit.

Some administration spokesmen did give different testimony to the Congress, I am aware, but Mr. Perle is in error in suggesting that the understanding of the participants in the negotiations was to that effect. None of those testifying at that time who made that suggestion were from the SALT delegation.

The second point has to do with the SS–20. Mr. Perle is correct that in a sense the SS–20 is a product of the SALT I Agreement, but I would put it in a little different way than he did.

In SALT I we insisted that the Soviets put into the pot and count in the limits all missiles of ICBM range. We knew there were several hundred Soviet SS-11's which were in fact oriented toward targets on the Eurasian periphery, sometimes called variable range ballistic missiles, but because they had intercontinental range we insisted they be counted in the Soviet ICBM quota, and that was done.

The result was that as the Soviets began to modernize their force of missiles facing Europe and the Far East they had already begun to shift from SS-4 and -5 intermediate range missiles to the SS-11. We penalized them by including these in the ICBM quota and they obviously concluded it was preferable to take a missile that was not part of the ICBM quota to meet their continuing requirements on the Eurasian theater.

Accordingly, they shifted to the SS-20 which was available because they had agreed in SALT not to deploy the SS-16 and that contributed to their SS-20 decision.

### CONCLUSIONS

Again, I think perhaps we should be thinking not only in terms of what SALT I did not do, but in terms of what additional we should have been trying to do. In retrospect it would have been better if we had started earlier to try to negotiate some of these additional systems.

Given the hour, I think I will conclude at this point and in concluding I would just like to stress again the need to treat arms control as an integral element in national strategic policymaking. Arms control policy should not take precedence over military policy or foreign policy, nor should it be left to be fitted in somehow after military and foreign policies are made.

Arms control needs to be considered in one element in making national policy, and military and foreign policy as well as technical considerations need to be brought to bear on arms control.

Senator **Garn**. Senator Proxmire.

Senator **Proxmire**. Thank you, Chairman Garn.

### CONTROL OF SOVIET DEFENSE COUNCIL

Mr. Garthoff, I want to thank you very much. You have been a specialist on the Soviet Union. You are called a Sovietologist.

I would like to ask you for that reason, what is the general meaning of the announcement of yesterday that Andropov will assume command of the Soviet Defense Council? What does that mean, especially on the prospects for arms control?

Mr. **Garthoff**. Almost certainly Andropov has been Chairman of the Defense Council since the day that he became the Secretary General of the party. Yesterday was the first time that any Soviet spokesman has identified him in that position, but I don't think it is a new development.

One reason that it is important is the Defense Council represents in fact a subcommittee, so to speak, the National Security Council Subcommittee of the Politburo, although in formal terms it is subordinate to the Presidium of the Supreme Soviet in the government structure.

As Chairman of the Defense Council and almost certainly as Commander-in-Chief of the Armed Forces, although he has not been publicly identified in that role yet, he is the man who is the chief executive, the national command authority, for questions of war and peace as well as a senior political figure.

It is still a curious element of the change in leadership that neither Andropov nor anyone else has yet been named as Chairman of the Supreme Soviet. I think that was probably to avoid an impression of excessively rapid concentration of power in his hands.

On the other hand, no one else has been named to that position, and he probably will be. He is clearly in the top position. At the same time I don't think, while not directly challenged at this point, he has yet fully consolidated his authority as the leader of the Soviet Union. He remains the senior in a collective leadership.

## SOVIET OPINION ON NUCLEAR WAR

Senator **Proxmire**. What is the state of the Soviet opinion about nuclear war today? Do they think they can win it?

Mr. **Garthoff**. Authoritative Soviet politicial and military leaders have been saying for some time that nuclear war would be a catastrophy for all and must be prevented. I think they mean it when they say that.

At the same time, Soviet military planning proceeds on the basis that while a catastrophy, it is still a possibility and they seek in their military doctrine and strategic preparation to prepare against that eventuality and they frame military requirements in terms of waging a war if it should occur.

I don't think that there is a difference between the political and military leadership, with the latter thinking that war can be won and the former not. There is a difference in responsibilities. Certainly the Soviet leadership, political and military, while concluding that nuclear war must be avoided if at all possible, has not decided that in fact means they should not continue to maintain a very substantial military establishment.

Senator **Proxmire**. The Soviet Union has publicly made a big thing of it, renounced a first strike or the first use of nuclear weapons.

Again, do you think that they mean that and what hypothetical situation would provoke them to engage in a nuclear first strike in your judgment?

Mr. **Garthoff**. I think they do mean it and I think it results from an internal decision several years earlier which was debated. Indeed, we saw after the announcement had been made that Defense Minister Marshal Ustinov had an article in which he seemed to be reassuring people who had some doubts about undertaking a unilateral commitment of that kind.

At the same time, I don't believe that this means that the Soviet leaders have sort of taken a vow never, under any circumstances, to be the first to use nuclear weapons.

Senator **Proxmire**. Under what circumstances would they use nuclear weapons first?

Mr. **Garthoff**. It is hard for me to imagine, but if there were in fact an internal disruption of a very serious kind, accompanied by a threat or actuality of a military move into the Soviet Union from without, that is the kind of contingency in which I could imagine where they would use nuclear weapons.

## U.S./SOVIET NUCLEAR EQUALITY

Senator PROXMIRE. Do the Soviets believe there is rough nuclear equality between the United States and the Soviet Union today?

Mr. GARTHOFF. Yes.

Senator PROXMIRE. Do they believe the United States is developing a first strike capability?

Mr. GARTHOFF. I think that the Soviet military and political leaders are concerned about what they perceive to be an American attempt to develop a margin of military superiority.

In part they talk about first strike capability of particular American weapons and American forces as a whole for purposes of I think in part, though, they are concerned in fact about those capabilities. I don't believe they seriously think the United States is planning for and attempting to prepare itself in order to launch a first strike.

I do believe they feel the United States is attempting to improve its relative military position to their disadvantage in order to take a more forward, tougher political strategy from positions of strength against their interests.

Senator PROXMIRE. Does the Soviet Union believe they could achieve nuclear superiority?

Mr. GARTHOFF. I think they do not believe that they have a real prospect of attaining anything that could be called a meaningful strategic superiority.

I think they see the situation at the present time as a kind of rough parity. They seem more concerned about the possibility that it could be tilted to our advantage by our programs than that they would be able to tilt it to their own advantage in any meaningful way.

If they could have superiority, sure, they would rather have that. I don't think they see that as either the present condition or something likely to be attained.

## SOVIET USE OF POISONOUS GAS

Senator PROXMIRE. Why would the Soviet Union cheat on the Biological Warfare Convention and run the risk of world condemnation in their use of poisonous gas and toxins in Afghanistan, Laos, and Cambodia which it seems clearly they have?

Mr. GARTHOFF. Assuming the charges are true, I think they probably felt they could get away with it.

Senator PROXMIRE. Is that because the treaty lacked effective compliance features?

Mr. GARTHOFF. They thought they could get away with it and that ambiguities in the agreement raised some technical question about violations.

For example, the Geneva Convention refers to nonuse in war. Well, what is going on in Afghanistan is in their view Soviet assistance to what is, to be sure, a puppet Afghanistan regime, but nonetheless in an internal conflict.

Now, don't anyone misunderstand I am suggesting that it is not reprehensible nor do I think it is any excuse for their doing it in the slightest. But I think it is possible that they considered that those agreements could be interpreted as not applying.

### MX DEPLOYMENT

Senator **Proxmire**. Do you think the deployment of the MX in existing silos will have any additional deterrent value on the Soviets?

Mr. **Garthoff**. No. I do not. I think if the MX had to be deployed, that probably would be the best way to do it, all things considered. But I don't think it is necessary for deterrence and I don't think it is necessary as a basis for proceeding with arms control.

### SOVIET REACTION TO U.S. BASING PLANS

Senator **Proxmire**. Given your experience as a SALT negotiator, how do you suppose the Russians rationalize the change of U.S. strategy plans from multiprotective shelters to Minuteman bases to closely spaced basing and then back to Minuteman basing with Midgetman coming on in 5 or 10 years?

Is this as confusing to them as it is to some Americans? What effect will it have on negotiating strategy?

Mr. **Garthoff**. I think they are probably somewhat confused by it. They do recognize that in part it stems from some domestic considerations such as local opposition to basing in particular areas and the like.

I think what they see principally is that, despite what we have said for a number of years, our principal interest in MX seems to be not having something invulnerable, but something providing counterforce capability.

### CONSEQUENCES OF START FAILURE IN U.S.S.R.

Senator **Proxmire**. If current negotiations in Europe on START fail, what do you think will be the response of Soviet leadership in the size of the defense budget?

If current negotiations in Eurpoe on START fail, what is the consequence?

Mr. **Garthoff**. I think that would depend principally on what we are doing with our programs. I don't think that the failure of the negotiations by themselves would necessarily have any immediate effect on Soviet military programing.

They have set their programs. That doesn't mean they can't be changed, but they have established them on the basis of presumption of the SALT II Treaty and have been proceeding on that basis.

I think that in the case of the INF talks, whether the talks continue or not, if the INF deployment does proceed, they will make some partly responsive and partly demonstrative military deployment, both in Europe and perhaps within range of the United States, to make good on their own threats, so their threats are not taken as bluff. They will seek principally to influence opinion in Europe, that while the alliance may go ahead with this deployment, it is not going to succeed in making a change in the strategic situation to the benefit of the NATO alliance.

Senator **Proxmire**. I have a couple more very brief questions.

## SOVIET LAUNCH-UNDER-ATTACK CAPABILITY

Do the Soviets have a launch on warning or launch under attack, Doctor?

Mr. **Garthoff**. There are many indications that since sometime in the 1960's the Soviet Union has had a launch under attack concept. This developed from an earlier interest beginning in the mid-1950's in——

Senator **Proxmire**. That means no——

Mr. **Garthoff**. Preemptive action. In both cases, it would be preemptive action where they behind on enemy attack to be underway or imminent.

Senator **Proxmire**. I want to make this clear. You say they have a launch under attack doctrine.

Does that imply they don't have launch warning?

Mr. **Garthoff**. It is hard to make a distinction, sir. It is hard to tell from the statements that the Soviets have made, and there have been quite a few, precisely how they would determine the point where warning led them to conclude they were under attack.

In other words, launch on warning might mean a laugh when the surveillance satellites and other means indicated that missiles had been fired from the United States, that certainly is something that could constitute warning to them.

On the other hand, they might wait for a situation in which radars and other means showed them that incoming warheads were in fact entering toward targets in the Soviet Union or they might even wait until the first had struck. But at some point in this process it is likely that they would launch their force.

## SOVIET MILITARY POSTURE FOLLOWING ELECTION OF ANDROPOV

Senator **Proxmire**. Could you identify any changes in Soviet military posture or theory as a result of Andropov's ascension to power?

Mr. **Garthoff**. It has been only 6 months. So far I don't believe there has been any indication of changes in Soviet military thinking or doctrine or programs. I think that the military leadership and military considerations play an important part in the collective leadership.

I don't think it is looked upon as a political versus military kind of situation. I think it would be incorrectly putting it to suggest that the military are calling the tune.

On the other hand, I think the views of the military leadership carry great weight in matters of arms control and other matters of this kind under the present leadership.

Senator **Proxmire**. Thank you.

Thank you, Mr. Chairman.

Senator **Garn**. Mr. Garthoff, I respect your experience in the SALT I negotiations and I obviously was not there at the time. I was mayor of Salt Lake City and I applauded SALT I. I remember being very pleased and writing a letter to that effect because I felt my life and that of my children had been made safer as a result of SALT I.

So, I would have been one who applauded the negotiations and did so at the time. I felt very good about it. But I try very hard to deal in hindsight which is a lot better than foresight. So I spent a lot of time particularly in 1978 and 1979 going through the negotiations trying to learn what had taken place.

I am sure you still feel SALT I was beneficial. I find nothing beneficial in hindsight because of the incredible Soviet buildup. We don't have time and we could spend an hour on this and I wish we had the time, but let me read to you a comment made by Henry Kissinger:

> By setting a limit to ABM defenses the treaty not only eliminated one area of potentially dangerous defensive competition, but it reduces the incentive for containing deployment of offensive systems. As long as it lasts, offensive missile forces have, in effect a free ride to their targets. Beyond a certain level of sufficiency, differences in numbers are therefore not conclusive.
>
> The interim agreement on offensive arms will freeze the numbers of offensive strategic missile on both sides at approximately the levels currently operational and under construction. Within this overall limitation, the Soviet Union has accepted a freeze of its heavy ICBM launchers, the weapons most threatening to our strategic forces.

He said it reduces the incentive to build up their offensive nuclear arsenal. That was said by all kinds of witnesses, it will reduce offensive systems.

Do you believe that it has in the light of the SS-17's, SS-18's, SS-19's, SS-20's, and so on?

Is there any evidence whatsoever that what Henry Kissinger said has transpired?

Admiral Moorer is certainly not known as a dove by any means. He stated:

> The agreement * * * permits the Soviet Union more offensive strategic launchers than the United States, but prevents them from having the strategically significant lead previously projected. We had no plans to construct additional strategic launchers in the 5-year time frame of the agreement. We thus reduced the growth of the Soviet lead through negotiations rather than by adding to our own force structure.

Melvin Laird said:

> The agreement limits the numerical growth in Soviet strategic ballistic missile forces which could threaten Minuteman, and so on.

There are just brief excerpts—testimony after testimony on both sides of the aisle, Republicans and Democrats. I would have been embarrassed to have been that far off on the mark as all of these officials and as one who agreed with them at the time.

In hindsight everything they said would not happen has happened. The Soviets have gone, far, far beyond what anybody thought they would in offensive weapon systems.

Do you agree with that?

Mr. GARTHOFF. I would certainly agree that the promise of SALT I was not fully met. I think that the benefits in particular of the ABM Treaty, as I mentioned, remain considerable.

Now, it is true that the SALT I limit on offensive forces only limited launchers. That stopped the Soviet SS-9 program at 308 against the 450 to 500 that had been predicted and which had been said would be so dangerous to our forces.

People were looking at the wrong thing. Throughout SALT I and SALT II people kept emphasizing throw-weight. The SS-9 had a great deal of throw-weight. All that throw-weight still only meant 308 targets.

What counted was MIRVing. It was the MIRV potential of that throw-weight that was and is important. But we didn't let the ABM Treaty stop us from going ahead with our MIRV program, although that had been a principal justification for it before.

We multiplied by several times the number of warheads that we had in the system before the Soviets did. I am not saying they might not have done it anyway. I do think it would have been possible to move rapidly with further negotiations to put more meaningful constraints on the offensive side.

In fact, both sides preferred to keep open their options and use those options to build up offensive forces. That is the failure.

### SOVIET RESPONSE TO BIGGER U.S. SHIELD

Senator GARN. There is additional dialogue on this subject in the Armed Services and Foreign Relations Committees by Senators Fulbright and Jackson and others. It was interesting. They talked about the ABM Treaty being very significant on the basis that if we don't build a shield, the Soviets now do not have a long enough sword to injure us and therefore if we don't build a shield, they will not build a bigger, longer sword.

Senator Fulbright replied in response to Senator Jackson that if they did, that would certainly be a violation, if not technically, of the spirit of the ABM Treaty. They did, they built the longer sword—SS-17, SS-18, and SS-19.

The ABM Treaty may have had some benefit, I don't totally discount it, but all these comments, and again we don't have the time to go through them all, throw doubt on its merits. This is not Jake Garn's opinion, this is sworn testimony before committees of this Congress in 1972.

It has not met that promise at all. It did not limit the Soviet offensive capability during most of the same time we have, for whatever reason, such as budgetary constraints. It has helped on the Soviet side. We have not built the longer sword in our case.

So, why such a defense of this? I am quoting all Republicans. Everyone I have quoted so far except Senator Fulbright was a Republican, my party. How incredibly naive they were in 1972.

That is fine if the people would look back and be willing on the basis of hindsight to say it didn't work the way we thought it would.

What I am leading to is that I opposed SALT II because as I said earlier, the limits were so high. Certainly we wouldn't have gotten Jimmy Carter's 150. It was not a realistic proposal to think the Soviets would cut their SS-18's to 150.

Was it realistic for them to hold to 308 and not 306 or 290? They gave us nothing, nothng whatsoever, on that heavy missile. We just agreed to what they already planned to deploy.

So, what Secretary Perle and I believe we are talking about is like INF, there is no doubt the Soviets would never accept zero-zero. Isn't there some middle ground?

Here we were and here the Soviets were. We compromised, we get over here and say, aha, we are going to split the difference. If you read the record of negotiations, that is essentially what happened.

I was in Geneva listening to the debate on heavy bombers. I listened to both sides. It is incredible how patient they were. They kept insisting on a particular level and waited for us to compromise. Sure, we are not going to be able to hold to what you and I and others consider unrealistic.

Senator Proxmire and I are good negotiators in the legislative field. He will tell you how many times in the Banking Committee we deliberately added things that we knew the House of Representatives would never accept, but we also knew we had to have that in the Senate version of the bill to get them to give something on that other side.

That goes on day after day in congressional committees. I don't know that it is any different in arms control. The question of when to back away from zero-zero, where is the pressure on the U.S. side? Where is the pressure on Andropov? Isn't there some middle ground?

Is a treaty valuable just because we have a treaty? Do you believe that SALT I or SALT II gave us a large benefit?

Mr. **Garthoff**. Senator, I agree and I have already said that SALT I and SALT II were seriously deficient in not putting real constraints on the offensive arms race by both sides. But it is not correct to say that we kept compromising our position and the Soviets never compromised on theirs. They made some very substantial compromises on their position.

### SS-20 DEPLOYMENTS

Senator **Garn**. In some areas, but in your major destabilizing weapons system they were unwilling to, just like the SS-20's. They have deployed more SS-20's in the 2 years since we started talks than they have at any other time. We have zero and they have over 300. They want us to keep zero and they want to come down to 162. That is as many as they had at the time the talks started.

Mr. **Garthoff**. At the time the talks started the Soviets had 600 missiles with 600 warheads facing Europe. Now they have about 500 missiles with about 1,500 warheads facing Europe. It is a question certainly of an increase in Soviet capability in putting in the SS-20's.

Whether it is appropriate to look at it, however, in terms of only land-based missiles of the Soviet Union and the United States, I think is questionable. There was only one brief period from 1958 to 1963 in which we had a maximum of 105 Thor and Juniper IRBM's in Britain, Turkey, and Italy and 96 long-range cruise missiles in Germany.

But we had deployed those there as an interim force before we were able to build up our ICBM force and then we took them out.

The Soviets, at a time when we had expected them in advance to be putting in more ICBM's, which they didn't, put in that force of over 700 SS-4 and SS-5 missiles because they saw that as filling out a requirement for deterrent and war-waging capability across the whole spectrum. They see that as a continuing military requirement, and that is why they replaced them with SS-20's.

Senator **Garn**. With a much more modern and capable system which we have not modernized?

Mr. **Garthoff**. It is a much more modern and capable system. It has a number of features which we had been urging on them in SALT. We are good teachers, reduce vulnerability, reduce megatonnage, and throw-weight, et cetera.

I agree that they increased the number of warheads. The decrease in vulnerability is something that has two edges to it. They are more accurate. I am not trying to down-play the capability of the SS-20.

### SOVIET SUBMARINE AND BOMBER FORCE

Senator **Garn**. The Soviets continue to say you have bombers, you have submarines and other things out there. So have they.

Mr. **Garthoff**. That is true. I suspect that a solution is probably not going to be found until there is a considerable broadening in one or both, in two directions, either into aircraft and other systems, or by bringing INF and START together or perhaps both.

Senator **Garn**. If we had a nuclear freeze proposal, do you see that there is any incentive whatsoever for the Soviet Union to remove SS-20's?

Mr. **Garthoff**. You mean a freeze under which we would——

Senator **Garn**. No production, no deployment.

Mr. **Garthoff**. Of Pershing II and GLCM?

I don't think that would be an incentive for them to go beyond the kind of offer they have already made in INF.

On the other hand, they understand very well that a unilateral American action in one year to put in a freeze can be reversed two years later, and I think they would like to have an agreement which would amount to a contract between the two sides as to what would be deployed and what would not be deployed.

Senator **Garn**. In my whole study of arms control I have never seen the Soviets yet give up a Soviet weapon system. During his confirmation hearings before the Armed Services Committee, I listed for Paul Warnke a number of unilateral cutbacks in U.S. weapon systems and told him I would vote for his confirmation if he could give me one example of Soviet reciprocity.

He could not and has not been able to do it to this day. I don't see any way if we eliminate Pershing II and MX that you will ever get the Soviets to reduce their numbers. If they would not reduce the numbers below 308 SS-18's during the Carter administration, I don't know when they will.

Whatever they can get for nothing, they will take. So would we.

I don't understand the psychology of those who so ardently want arms control and yet seem to me to undermine the possibility in light of hindsight on SALT I and SALT II.

### FIRST STRIKE CAPABILITY

Again, time is about up, but looking at first strike for a minute, we already have first strike capability. I understand the argument about first strike, Minuteman is a first strike weapon. Now there is a debate to defeat MX because it is a first strike weapon.

Minuteman is a first strike weapon if we decide to use it first. I don't agree that the Soviets would not strike first. It is easy for them to say. It sounds good. With their massive conventional superiority, I think that does enhance the possibility of war taking place and escalating to a nuclear war.

If we renounce first strike, I am not in favor of it, but if we renounce it and take away the uncertainty, I think it invites a greater possibility of their using their conventional forces.

You made a comment that I think is very important, and I understand you did not excuse it in any way, about the use of chemical and biological weapons in Afghanistan because they thought they could get away with it. I couldn't agree with you more.

In my study of the Soviet Union, that is their philosophy. Anything they can get away with in any area, whether it is cheating on SALT I, testing of SAM-5 missiles and radar, man ABM battle management mode, they will say that was not cheating, they didn't understand the treaty that way. That is what they do.

### ON-SITE INSPECTION

They explain anything we call cheating as ambiguity in the treaty. They will get away with whatever they can. If they want stability and they don't want strategic superiority, then what is wrong with on-site inspection?

What is so unrealistic about saying we will allow on-site inspection even if that on-site is electronic testing equipment near their launch platform for testing their ICBM's or near Vandenberg in our country?

If they are sincere, what is wrong with trying to negotiate on-site inspection?

Quoting your own statement, they will get away with what they can.

Mr. **Garthoff**. That was my suggestion as to why I thought they had done what they evidently have in using toxins and chemical warfare in Afghanistan and Indochina. I think there is a considerable difference, however, between use and abuse even of loopholes and ambiguities on the one hand and clear violation on the other.

I have not studied enough about the precise terms of the Geneva Convention, for example, or the BW Convention, nor have I had more than an active citizen's knowledge from the newspapers as to what has happened in those instances.

I know more about the SALT situation, however, and many of the alleged violations have not been violations at all. Some of them are questions of misunderstanding as to what has actually occurred.

### TELEMETERING DATA

Senator **Garn**. What about the encryption of telemetry data in recent tests? There have been many, many instances. There were some in the last few months.

Mr. **Garthoff**. I am not privy to the current intelligence on what has happened. I do know it has been said there was complete encryption in the case of the second missile test, but also that we know enough about it to know its stages and to have a judgment as to its compatibility with the SS-13.

Senator **GARN**. That is not the point whether we are able to decipher enough. The proscriptions are clear in SALT II about encryption of telemetry.

Mr. **GARTHOFF**. This was a matter argued at considerable length and where we did not get Soviet agreement to ban encryption; encryption is allowed.

Senator **GARN**. Under limited circumstances.

Mr. **GARTHOFF**. The other way around. The limitation on encryption is a limitation on matters that would impede verification of the treaty. Anything else is allowed. I think that is a difficult proscription to apply. I don't think it is a good one for that reason.

Senator **GARN**. I agree. There are a lot of things that are different. That is why we need better verification, including on-site inspection.

Mr. **GARTHOFF**. On-site inspection would in some cases no doubt be of great assistance. In some others it might not. I don't think it is necessarily the answer in all cases.

If we are talking about encryption, for example, you would have to actually have a full sharing on both sides of our research and development programs if you were going to deal with the problem completely, something I think we are not prepared to do.

Senator **GARN**. You are never going to deal with it completely, but certainly in the testing phase after we lost our monitoring site in Iran, it made it a great deal more difficult in determining their launches.

I am sure you are aware how important the first few seconds of those launches are and the necessity in that testing phase to have the first minute or so of those.

The hour is late. I sincerely wish we could pursue this further. But time is gone.

We will reconvene at 3 o'clock with Kenneth Adelman and the other scheduled witnesses who will come back to the subcommittee for further testimony.

Mr. Garthoff, we thank you very much for your willingness to come and testify today.

### SUBCOMMITTEE RECESS

The subcommittee will recess until 3 p.m.

[Whereupon, at 1 p.m., Tuesday, May 10, the subcommittee was recessed, to reconvene at 3 p.m., the same day.]

(AFTERNOON SESSION, 3:30 P.M., TUESDAY, MAY 10, 1983)

## ARMS CONTROL AND DISARMAMENT AGENCY

### STATEMENT OF HON. KENNETH L. ADELMAN, DIRECTOR OF THE ARMS CONTROL AND DISARMAMENT AGENCY

### INTRODUCTION OF AMBASSADOR ADELMAN

Senator **PROXMIRE** [presiding]. Senator Stevens is late and has asked me to go ahead.

Our leadoff witness is Ambassador Kenneth L. Adelman. Prior to his appointment he served as Deputy Representative of the United States to the United Nations. As such he was head of the Presidential delegation to the Second United Nations Special Sesssion on Disarmament and head of the delegation of the United Nations' First Committee.

He has written widely on national security and foreign policy and published in the Washington Quarterly.

Mr. Ambassador, go ahead. I want to thank you so much for making your statement available to us in advance. You are one of the few witnesses who did and the first one we got. If you want to abbreviate it in any way, we will be all set to go ahead with questions.

Ambassador **ADELMAN**. Thank you, Mr. Chairman.

I do want to abbreviate. Let me say I am very pleased to be here before the Senate Appropriations Committee and, in baseball terms, back under the lights on the Senate side that I have gotten familiar with since mid-January.

Mr. Chairman, I wanted to summarize my statement very quickly and say that obviously the potential to limit and reduce nuclear weapons is one of the great challenges of our era which is why I am so honored to be before you as Director of ACDA at this time.

We have to move ahead on arms control agreements. They can help reduce the risk of war. They can help limit the spread of nuclear weapons, help reduce misunderstanding of particular events or accidents, can help channel modernization into stabilizing rather than destabilizing paths.

At times they can help save some defense dollars. But, as we will talk about later on, this may not be a primary goal, is not a primary goal of arms control.

The primary goal is to make a safer world, keep the peace, reduce the risk of nuclear war and reduce the risk of any war. This may cost less money or may cost more money. The point is to have deterrence and to have international stability. That is the most important concern.

## DETERRENCE

A word about deterrence. It cannot be a bluff. It has to be credible to the Soviets and would have to deter what they are interested in to prevent any kind of conflict. The modernization of our forces is necessary, both for deterrent capability and for arms control capability.

They are two parts of the same pattern to increase international stability. Our START proposals are quickly summarized under the key elements. Limit of 5,000 deployed ballistic missile warheads, a sublimit of 2,500 on ICBM warheads, other constraints designed to reduce the existing 3-to-1 Soviet advantage in ballistic missile throw-weight.

The new technological areas are handled in the section about the growth of the Soviet military budget which has been going at a level of effort twice that in terms of percentage of GNP that we invest. This investment has led to an unprecedented buildup in their strategic and theater unclear forces over the last decade.

Although arms control may not be able to halt all the aspects of the Soviet buildup, I believe it has the potential to reduce parts of it and channel it is not areas that are more stabilizing. This is one of the interesting point of the Scowcroft Commission report.

It has been accomplished in the past and can be accomplished in the future. Past accomplishments include the Limited Test Ban Treaty, ABM, Space Treaty. We are hoping in START and INF to really add to this list.

## DEFENSE EXPENDITURES

On the question of the defense expenditures, to be very frank, it is not likely that arms control agreements can substantially reduce nuclear arsenal savings. In other words, arms control agreements would not result in enormous savings on our overall budget.

For one thing the relative cost of the nuclear arsenal in the total defense budget is small, about 15 percent. It is about 8 percent in terms of procurement.

On the item of cost, the Scowcroft Commission, as you know, Senator Proxmire, recommends a Midgetman, a new small ICBM, to be developed. It must be flexible enough for a survivable basing mode in a variety of ways.

The cost of doing that would be higher per warhead than would be the cost per warhead of the MX, but the cost of survivable warheads would be lower because of the increased survivability that would come from the additional basing mode possibility and the dispersal, of course, of a smaller missile.

We believe that the development of force in that direction over time helps improve stability and reduces the threat of a first strike and encourages the Soviets to do likewise and would be well worth any additional cost in terms of overall strategic stability.

The last point on knowledge of the Soviet activities. Obviously monitoring Soviet forces and force operations is essential to saving our defense dollars. The more we know about the Soviet forces the more precision we have in tailoring our own defenses to meet the threat and know more.

It helps insure that an agreement once adopted will remain effective. It is good for compliance in both START and INF.

## VERIFICATION

We are developing verification regimes to be sure we can verify Soviet activities. We can talk about that in great depth. Prohibition against activities would impede verification.

In addition to provisions which would insure effective verification, we have proposed confidence-building measures in both negotiations which would insure that both sides could be notified in advance of all ballistic missile launches. We have also proposed that notifications be required for majority military exercises and that strategic forces data be exchanged.

I believe that all of these provisions have the potential to markedly improve our knowledge of Soviet military activities, reduce uncertainties, and ensure that any agreement can be effectively verified. These are important if we are to create conditions in the world wherein peace can endure and freedom and diversity can everywhere be cherished.

[The prepared statement of Ambassador Adelman is as follows:]

# PREPARED STATEMENT OF KENNETH L. ADELMAN
## DIRECTOR
## ARMS CONTROL AND DISARMAMENT AGENCY

Mr. Chairman:

I am most pleased to be here today to discuss the important issues raised in Senator Proxmire's letter of April 20 relating arms control to military strategy and exploring what military and budgetary benefits would flow from limiting and ultimately reducing the nuclear arsenals of the United States and the Soviet Union.

To me the potential to limit and reduce nuclear weapons offers one of the great challenges of our era, which is why I am so honored to be before you as Director of ACDA at this time. Soundly based and carefully considered arms control agreements can help reduce the risk of war; can help limit the spread of nuclear weapons; can help reduce the risk of misunderstanding particular events or accidents; can help channel modernization into stabilizing rather than destabilizing paths; and can help save some defense dollars by allowing us greater precision in estimating Soviet weapon developments thereby reducing the need for us to over-insure against worst-case projections of their force posture.

Mr. Chairman, the cost-saving aspects of arms control should not be neglected, but neither should they be over-emphasized. Our primary goal in arms control is to make for a safer world to reduce the risk of nuclear war, and to reduce the risk of any war. This may cost less money or it may cost more money. Regardless, it is worth doing just as fully as we can, for mankind's sake.

In our overall approach, we presume the Soviets have interests similar to ours. In specific aspects, however, the Soviets will pursue their own agenda, attempting where they can to gain advantage, to undermine the effectiveness of our deterrent, to use negotiations to split us from our Allies. Such differences do make negotiations difficult.

Let us move on to address the four questions which Senator Proxmire posed in his letter. First, how can arms control maintain and improve the credibility of the US strategic deterrent. This is the central question.

A word about deterrence is in order, to set the stage. Deterrence is not, and cannot be bluff. In order for deterrence to be effective we must not merely have deterrent forces, but we must be seen as being able and prepared, if necessary, to use our forces effectively against the key elements of Soviet power. Deterrence is not an abstract notion amenable to simple quantification. Still less is it a mirror image of what we would need to deter ourselves. Deterrence consists of the set of beliefs in the minds of Soviet leaders, given their own values and attitudes, about our capabilities and our will.

Effective deterrence and effective arms control have both become more difficult to achieve due to Soviet conduct and Soviet weapons programs in recent years. By word and deed, the Soviets have shown that they regard military power, including nuclear weapons, as the key to projecting their power and influence around the world.

In order to deter Soviet threats, we must be able to put at risk those types of targets the Soviets seem to value most, such as hardened military command bunkers and facilities, missile silos, nuclear weapons themselves and other storage areas. This capability presents the obvious risk to the Soviet leadership that the damage to them resulting from an initial attack by them on the United States or our Allies far outweigh any possible benefit. This is essential for deterrence. The belief--or was it just a hope?--that the Soviets would unilaterally stop their strategic deployments at a level short of being able seriously to threaten our forces vanished with the deployment of their SS-18 and SS-19 ICBMs. With these deployments, the Soviets could be tempted, in a crisis, to feel they could successfully threaten us or even undertake conventional or limited nuclear aggression in the hope that the United States would be restrained by the lack of a fully effective response.

We need to prevent this kind of situation by taking the necessary steps in our strategic modernization program. An effective policy of deterrence requires that we enhance the overall survivability of our strategic forces to enable them to threaten, in a second strike, those targets that Soviet leaders most value. This necessary modernization could not, of course, take place if a nuclear freeze were in effect.

At the same time, we must seek to deploy forces that do not significantly aggravate current instabilities, but rather reduce them. We must modernize our forces in a manner which cannot reasonably be perceived as a first strike capability. This modernization will move us towards greater strategic stability, not less.

In this regard, I fully endorse the recommendations of the Scowcroft Commission for modernization of our ICBM forces, which are extremely sensitive to the need for greater stability. These recommendations are, as you know:

-- Deployment of 100 MX in existing Minuteman silos so as to improve our capability to destroy hardened targets and redress overall inequalities but without presenting a first strike threat against Soviet ICBMs.

-- Development of a small, single warhead ICBM that would reduce the value of individual ICBMs to a Soviet strike, and that would provide greater flexibility in possible basing modes.

-- Vigorous pursuit of arms control agreements to reduce instabilities and to channel both sides' strategic modernization toward stabilizing developments, deployments, and reductions.

President Reagan's START proposal seeks to achieve these same goals. It would accomplish significant reductions in the most dangerous and destabilizing weapons in the nuclear arsenals of both sides: ballistic missiles in general, and ICBMs in particular. Key elements of this proposal include:

-- a limit of 5000 on deployed ballistic missile warheads,

-- a sublimit of 2500 on ICBM warheads, and

-- other constraints designed to reduce the existing three to one Soviet advantage in ballistic missile throwweight.

If our proposed reductions were achieved, the ability of US forces to survive and respond to a Soviet strike would be enhanced. Strategic stability would thereby be strengthened. This same rationale underlies the President's proposal to reduce to equal levels, as close to zero as possible, the number of land-based INF missiles of longer range in Europe.

Let us now turn to the second question on how arms control can prevent US-Soviet military competition from spilling over to new technological arenas.

Surely, but sadly, competition will long be a fundamental element of the US-Soviet military relationship. Despite economic difficulties, Soviet leaders continue to invest 12 to 14 percent of their country's gross national product for military spending, more than twice the percentage of GNP we invest. One of the results of this investment has been an unprecedented build-up in their nuclear forces over the last decade. This buildup continues, both in strategic and theater nuclear forces. The Soviets are testing a new generation of ICBMs, constructing new ballistic missile submarines, converting a large number of their SLBMs to more effective MIRVed missiles, and will soon deploy a new heavy bomber which will probably carry long-range cruise missiles. They are also expanding deployment of SS-20s.

Although arms control may not be able to halt all aspects of the Soviet build-up, I believe it has the potential to reduce parts of it and channel it into areas that are more stabilizing. This has been accomplished in the past and can be achieved in the future. Past accomplishments include:

-- The Limited Test Ban Treaty which bans nuclear weapons tests in outer space, in the atmosphere or under water.

-- The ABM Treaty which limits ABM deployments to one area and ABM interceptors to 100 on each side, and bans deployment of ABM systems based on new principles. The ABM Treaty also bans development, testing or deployment of sea-based, air-based, space-based or mobile land-based ABM systems or components.

-- The Outer Space Treaty which bans nuclear weapons and other weapons of mass destruction from space.

We hope to realize such achievements in the future. For instance, in START, we have proposed reductions in total ballistic missile throw-weight to levels below current US levels and deep reductions in the deployment of heavy ICBMs. These constraints, if implemented, would channel Soviet modernization of ballistic missiles into less threatening areas.

It should be kept in mind, however, that modernization, if properly designed, can improve strategic stability. The Scowcroft Commission was most eloquent and most persuasive on this very point. We had, in fact, taken this consideration into account in the US START proposal before the Committee's report. Our START proposal would permit continued modernization to enhance the survivability of our strategic bomber forces and our ballistic missile-carrying submarine forces.

This consideration was also recognized by President Reagan in his speech on March 23, 1983. He directed that a comprehensive effort be undertaken to determine the technical feasibility of eliminating the threat posed by ballistic missiles. He also directed that we undertake to study the questions of strategic stability inherent in such a goal, including how the combination of arms control and technology development could remove the threat of nuclear weapons exchange which hangs like the sword of Damacles over the world.

The third question for us to examine was how arms control can maintain US defense expenditures within limits of economic and political acceptability.

To be frank, it is not likely that even those strategic arms control agreements which substantially reduce nuclear arsenals can offer us as large savings as some assume. For one thing, the relative share of the cost of nuclear arsenals to the total defense budget is small -- about fifteen percent.

Nevertheless, some savings could be realized, as they have in the past. The ABM Treaty, in combination with the SALT I Interim Agreement, may have resulted in savings at that time of approximately $6 billion. This amount would have been required if all four proposed ABM sites which had been planned in the early-1970s had been constructed. If our START and INF proposals were to be accepted by the Soviet Union, there could also be savings in US strategic force costs since we would be deploying far fewer systems than we would in the absence of these agreements. But it is premature to forecast the scale of reductions or the specific savings that could accrue.

Speaking of costs, I should note that they could go up. The Scowcroft Commission recommended that a new small ICBM be developed that could be flexibly based in a variety of survivable modes. As the US ICBM force evolves towards a posture which has fewer warheads spread over a larger number of missiles, construction and operating costs would be greater (not less) than for a force with a smaller number of missiles that carried an equivalent number of warheads. The simple cost per warhead would be higher. But the cost per survivable warhead would be lower because of the increased survivability that could accrue from the additional basing possibilities with a smaller missile. Obviously, Mr. Chairman, cost savings is not the ultimate objective. Peace, stability, and lowering the risk of nuclear war are our ultimate objectives.

Evolving our force in a direction that improves stability and reduces the threat of a first strike, and encouraging the Soviets to do likewise, would be well worth any additional costs for the enhanced stability that such an approach offers. Moreover, we will try as hard as we can to reach mutually agreed lower levels of warhead deployments. If we succeed, ultimately the net cost may well be less.

The fourth and final question we are to address here is how can arms control improve the ability of the United States to monitor Soviet military activities?

Monitoring Soviet forces and force operations is essential to saving defense dollars. The more we know of adversary forces, the more precision we have in tailoring our defenses to meet the threat and no more. It also helps to ensure that any agreement, once adopted, will remain effective. Both countries must have confidence in their ability to verify compliance with the provisions of an agreement. In the absence of such confidence, uncertainty is increased, and an agreement could become a source of further contention and mistrust between our countries, rather than a mutual step towards greater stability and lowering the risk of war.

In both START and INF we are developing a verification regime to ensure that we can confidently verify Soviet activities which would be related to the provisions of the agreements we hope to achieve.

This includes:

- Establishment of an agreed data base concerning arms limited by an agreement.

- The consideration of cooperative measures that would supplement national technical means (NTM) of verification and cooperative measures that go beyond NTM.
- Strict prohibitions against activities that would impede verification.

In addition to provisions which would ensure effective verification, we have proposed confidence building measures in both negotiations which would ensure that both sides could be notified in advance of all ballistic missile launches. We have also proposed that notifications be required for major military exercises and that strategic forces data be exchanged.

I believe that all of these provisions have the potential to markedly improve our knowledge of Soviet military activities, reduce uncertainties, and ensure that any agreement can be effectively verified. These are important factors, since we are helping to create conditions in the world wherein peace can endure and freedom and diversity can everywhere be cherished.

This concludes my formal remarks. I would be happy to answer your questions at this time.

### ACDA PRIORITIES

Senator **Proxmire**. Thank you very much, Doctor.

Let me first ask some questions relating to the priorities we put on your agency. This is the Appropriations Committee. We have to look at things in terms of their cost.

Last year it was pointed out by Senator Pell on the floor that we spent far more on military bands than we spent on your Agency, on the Arms Control and Disarmament Agency and six times as many people were involved in military bands as were involved in the Arms Control and Disarmament Agency.

What is the size of your budget? How much are you requesting for this coming year?

Ambassador **Adelman**. We have a level in the House and Senate of about $20 million.

Senator **Proxmire**. $20 million?

Ambassador **Adelman**. Yes.

Senator **Proxmire**. You said that the nuclear arsenal cost as it is presently targeted, the strategic cost is about 15 percent. You said only about 15 percent of our defense budget. That is about $30 billion?

Ambassador **Adelman**. Yes.

Senator **Proxmire**. If you compare the cost of your budget of $20 million with $3,000 million, which is what $30 billion is, the discrepancy is obvious. Even a modest saving achieved by arms control would obviously pay for itself many times over, would it not?

Ambassador **Adelman**. I believe the amount of savings in arms control would be very beneficial, yes.

Senator **Proxmire**. So from the standpoint of cost, although you can argue that it is not the whole defense budget we are talking about, arms control could work with conventional weapons, too, could it not?

Ambassador **Adelman**. Yes.

Senator **Proxmire**. At any rate, from concentration in the strategic area there is still immense savings particularly when you put those in relationship to each other?

Ambassador **Adelman**. There is the possibility for an immense saving. My whole point, Senator Proxmire, was that so much of the rhetoric and the feelings about arms control overemphasize the cost savings aspect and to me deemphasize strategic stability.

Senator **Proxmire**. You are right when you say the purposes of arms control are a safer world and to reduce the risk of nuclear war and reduce the risk of any war, that objective is so absolutely vital, so critical, it seems to me that we should spare no resources in trying to achieve it.

It does seem to me that $20 million—I certainly don't believe in throwing in money to solve it.

Ambassador **Adelman**. You are not known for that.

Senator **Proxmire**. $20 million does seem to be a very, very modest effort.

I understand you were at the National Security Council meeting this morning to discuss how to amend our START proposal to bring it into line with recommendations of the Scowcroft Commission report.

What can you tell us about our START proposal and how it will be changed?

Ambassador **Adelman**. I can tell you that the review is continuing——

Senator **Proxmire**. What is continuing?

Ambassador **Adelman**. The review of our START proposal in terms of the Scowcroft Commission report, that it is being studied very thoroughly in ACDA as part of your $20 million investment for arms control. It is being studied by the President and by the Acting Secretary of State and Defense and top people in the National Security Council.

Senator **Proxmire**. Can you give us any idea when we will have a new negotiating position based on the Scowcroft report.

Ambassador **Adelman**. I can't because that is up to the President to decide when to make an announcment.

### GENERAL ADVISORY COMMITTEE

Senator **Proxmire**. Now the idea that the United States ought to establish a bipartisan commission of arms control experts to negotiate arms control agreements with the seasoned Soviet negotiatiors has been gaining steam on Capitol Hill of late.

How do you respond to proponents of such an idea?

Ambassador **Adelman**. Basically, as you know, Senator Proxmire, we have a commission legislated by the Congress, General Advisory Commission, started by Senator Hubert Humphrey, I believe, to advise the President, the Secretary of State, and Director of ACDA. It currently has 15 members. They are all appointed by the President and confirmed by the Senate.

Their task is to look at the arms control and give advice. It is a bipartisan body now and can be made, I think, more responsive in the sense of being involved in the arms control decision. Generally speaking, I think it is a good idea to have advice from outside quarters.

I know that the President and the Secretary of State, I and others involved in arms control are seeking advice from those outside the Government as well as inside the Government in a bipartisan mode.

Senator **Proxmire**. This commission you refer to is not a negotiating agency, is it?

Ambassador **Adelman**. No, it is not. It is an advisory body for the President and the Secretary of State.

Senator **Proxmire**. One of the reasons is to get continuity so that you don't have one administration coming in and changing positions on something that does require continuity.

You get expertise because you get people who have served there perhaps 8 years or more and it would be quite different therefore than the Humphrey commission to which you refer.

Ambassador **Adelman**. Let me say in all honesty, ACDA was set up to give continuity from administration to administration just like the State Department, Treasury Department, and Agriculture Department, and to have the expertise, and the expertise in ACDA is quite outstanding if you ask me.

I think there are individuals who think——

Senator **Proxmire**. Let me interrupt to say one of the weaknesses in ACDA, though, is that you are the head of it and through no fault of your own are a partisan appointee of President Reagan.

I just talked to a Republican Senator on the floor who said that he strongly favors this because it would mean that you would have perhaps a seven-man body to which no President could appoint more than four because you would have carryover terms.

At least it would be unlikely he would appoint more than four. And that would be more satisfactory because we do need not only expertise and continuity, we need bipartisan support.

Ambassador **Adelman**. I agree we need continuity and we need expertise and we need bipartisanship. I think we can basically receive those qualities in the present structure.

Let me say from a more philosophical vein, if I could, that so much of the sentiment these days on arms control is to make it of a nature that divorces it from executive responsibility and executive accountability.

Senator **Proxmire**. You are saying no to that?

Ambassador **Adelman**. No, I am not.

Senator **Proxmire**. It divorces it from responsibility. I assume that you think the executive should be responsible?

### RESPONSIBILITY OF EXECUTIVE IN TREATIES

Ambassador **Adelman**. The executive should be responsible for negotiating treaties. I don't believe we should contract out to any group to do our negotiations for them and to make them removed from Presidential authority because I think one of the large tasks of any President is national security and foreign policy and maintaining the peace.

I don't believe you can take arms control and divorce it from that thread of concerns for national security and maintaining the peace and foreign policy.

To think that in arms control you could have a Federal Reserve System, for example, to leave it outside the executive branch, to say that this is going to be a body to take care, like the Federal Reserve System does have monetary policy, divorced from the President, I don't think is realistic.

Senator **Proxmire**. I think you are making a very strong case for your position. But your position still seems to be one of rejection?

Ambassador **Adelman**. I am saying whether you have your ACDA which is an advisory role, whether you would enlarge the membership or do something in ACDA or have another advisory group to me is less important than understanding that these are advisory groups; these are not groups to do the negotiation and they are not groups to relieve the President of accountability or responsibility for arms control.

Senator **Proxmire**. You argue as a condition for accepting and approving the Scowcroft recommendations, particularly on the MX, that this kind of commission would be necessary. I can't see, the way you describe your view, why the commission would opt that that would be much of a concession.

Ambassador **Adelman**. Senator Proxmire, let me ask you so that you can get a dialog going, I believe that one of the things for which a President is elected every 4 years is to have responsibility and accountability with the guidance of the Congress and the Constitution, but responsibility for that security or foreign affairs and arms control is a part of it.

Senator **Proxmire**. I would not argue about your right to say that you reject the idea of having this kind of commission appointed to negotiate. I just want to get on record whether or not you accept that, having a commission that would negotiate, or not.

I take it you reject it?

Ambassador **Adelman**. If they are diluting the responsibility of the President, I would reject it.

### INF AND START

Senator **Proxmire**. In testimony before the committee last week Adm. Stanfield Turner and again this morning Dr. Raymond Garthoff, the suggestion was made due to the Soviet's overwhelming fear of the Pershing II missile system, INF an START negotiations ought to be merged.

How do you feel about that suggestion and what sort of benefits are likely to accrue to the United States by such a proposal?

Ambassador **Adelman**. I think that the Soviet's fear of the Pershing II missile is a very good impetus for them to accept the zero option where we would both get rid of the weapons on each side and have the entire class of weapons removed.

I would think that at this time, because this is the year of deployment, that it would not be a good idea at this time to merge the negotiations.

I think we should try in INF to get the zero option, the total elimination of the entire range of missiles, the intermediate range nuclear forces in Europe and to simultaneously try in START for an agreement on strategic nuclear weapons. It would be very complicating this year to combine the negotiations.

### VERIFICATION

Senator **Proxmire**. What kind of verification problems would be posed if the Soviets went to a road or rail mobil single warhead ICBM traveling in the vast expanse of the Soviet Union?

Ambassador **Adelman**. I would think that you would have to do more complete monitoring or you could do greater notification. It would depend on your verification, what arrangements you could work out.

If there would be notification of the mobility of an ICBM force, then that would not create the kind of problems if there were not notification of mobility.

Senator **Proxmire**. That certainly would be a terrific challenge for arms control, would it not, because the whole purpose of mobility is deception and invulnerability to the point of a missile moving around so that the opposition wouldn't know where it was.

If you could negotiate that, then you could in effect negate, destroy whatever benefit mobility gave you?

Ambassador **Adelman**. I am saying that with certain kinds of provisions in an arms control agreement you could get an agreement for the notification back and forth.

If you do not get that kind of agreement, then you would have to have greater verification techniques or greater capabilities for monitoring of that kind.

Senator **Proxmire**. Notification of where a missile is moving?

Ambassador **Adelman**. No, you would have notification they were going to move it at a certain time or notification like the President has proposed on testing of ballistic missiles.

Senator **Proxmire**. In other words, it would pose a tough verification problem?

Ambassador **Adelman**. It would pose a tough verification problem, yes.

Senator **Proxmire**. As you imply, there would be no way to really solve that?

Ambassador **Adelman**. I am not saying there is no way.

Senator **Proxmire**. You would not expect them to tell you where they were moving it?

Ambassador **Adelman**. You could expect them to tell you there was movement on a certain system or you could exchange information on the capabilities of that system. Those kinds of things could make for greater strategic stability on both sides.

The point is that that would be one factor that could arise that would complicate verification provisions. There are lots of factors that complicate verification provisions and verification is a very tough kind of activity.

Senator **Proxmire**. Will you submit to the committee a study of the effect on verification and any other consequences of a small single mobile warhead missile?

Ambassador **Adelman**. Certainly.

[The information follows:]

### Effectiveness of Verification of Limits on Small Mobile ICBM

The effectiveness of verification of limits on a small mobile ICBM would depend on the precise nature of the limits, how the missile was deployed, what collateral constraints on deployment modalities to facilitate verification were agreed, on what cooperative measures to enhance verification were agreed, and on other factors as well.

If the U.S. proceeds with a small single warhead land mobile ICBM, it will design the deployment concept so as to facilitate verification. We would hope the Soviets would do the same, but we will insist in strategic arms agreements on collateral constraints and cooperative measures necessary to provide for effective verification, in the event of such Soviet deployments.

### BUILD-DOWN PROPOSAL

Senator **Proxmire**. Dr. Adelman, does the administration support the so-called build-down proposal whereby each country eliminates two nuclear warheads or one phase of two weapons for one, a proposal supported by Senators Nunn and Percy?

Ambassador **Adelman**. The thrust of the build-down proposal is the same thrust as the administration is trying with START and INF negotiations.

On the specific provisions there are conversations back and forth right now between the sponsors and the administration on definitions of the terms and provisions in that resolution.

Senator **Proxmire**. You say that they are simply looking at the terms and have not taken a position one way or the other?

Ambassador ADELMAN. That is true. There are obviously some definitional problems and some verification problems. The main thrust, though, is a very positive one, the idea of genuine reductions.

Senator PROXMIRE. Was that discussed at the National Security Council?

Ambassador ADELMAN. Yes.

Senator PROXMIRE. Can you tell us the resolution?

Ambassador ADELMAN. No.

Senator PROXMIRE. One of the problems I see in the build-down is that it seems to me we have a very, very difficult problem of definition. Otherwise you can phase two weapons obviously for one. The tendency would be to trade obsolete weapons or ineffective weapons for one that is a whale of a lot more efficient.

The result would be to get the notion you are reducing nuclear arsenals on both sides where actually you are strengthening both sides and the arms race goes on.

Ambassador ADELMAN. You are right. There are definitional problems. In the resolution it says newly deployed warheads. You ask yourself is that a new type of warhead or a warhead on a new type of ICBM or other strategic system or exactly what kind of missile?

You are absolutely right, another important factor is yield, the throw-weight or destructive capability of a warhead.

Senator PROXMIRE. For example, the point was made over and over and over again that we have less megatonnage and fewer warheads now than we had in the middle 1960's which is a well-known factor to people who have followed this at all.

I wouldn't argue on that basis that our nuclear deterrent is weaker now or lesser than it was. It is refined, more precise, more accurate, more reliable.

Looking at it that way it would seem to me a build-down might give you the superficial impression that you are reducing the arms race and have it under control rather than it might be moving ahead rather rapidly.

One of the advantages of the Arms Control and Disarmament Agency is that they look down the road and anticipate future arms control problems. Secretary Kissinger has lamented the fact he did not anticipate the negative consequences of the United States and Soviet MIRV programs.

### IMPACT OF TECHNOLOGY ON ARMS CONTROL

What, in your opinion, are the three most technical developments on the horizon in arms control today?

Ambassador ADELMAN. That is a good question. I would say one is the problem of verification of cruise missiles. That is going to be an important subject in the coming years.

When you like at missions of cruise missiles, be they conventional or nuclear capable, be they on ships, the SLCM, surface vessels, submarines, land based, air based, to verify cruise missiles I think is an important subject down the road. It is something we should really begin on right now.

Second, I would think that if we could in some manner think of a new creative kind of approach to weapons in outer space and disarmement proposals in outer space—I am not at all sure that that is possible, but I would think that is worth a good deal of study and attention in the realm of down-the-pike planning.

Senator **Proxmire**. What kind of resources, what kind of capability do you have in your Agency now to get into this extraordinarily complicated and difficult weapons in space, antisatellite technology, particle beams, the lasers, and so forth? Do you have people aboard now?

### OUTER SPACE ARMS CONTROL

Ambassador **Adelman**. We have not only people in the Agency who have expertise on this, they can draw very widely throughout the Government, Department of Energy, Department of State, Defense and other agencies, plus we have research funds of over $1 million per year to do this kind of study.

Senator **Proxmire**. Can you give us for the record the names and experience of people who have those qualifications? I don't mean right now.

Ambassador **Adelman**. The kind of expertise on those subjects I mentioned?

Senator **Proxmire**. That is right.

Ambassador **Adelman**. Or throughout the Agency?

Senator **Proxmire**. The kind of expertise that would put you in a position to be on top of these technological developments that are coming out?

Ambassador **Adelman**. Sure.

[The information follows:]

### Technological Developments

The Bureau of Verification and Intelligence takes the lead in Soviet technological developments and in the development of verification techniques. The Bureau of Nuclear Weapons Control takes the lead in nuclear proliferation issues, technology transfer and, through its drafting of arms control impact analyses, on U.S. technological developments.

The Strategic Programs Bureau considers the impacts of technological developments and verification techniques on the START and INF negotiations, and on space arms control. Finally, the Bureau or Multilateral Affairs applies these elements to discussions in the Committee on Disarmament, the MBFR negotiations, the test ban area, and other multilateral fora.

Thus, expertise in technological developments is spread widely through the agency; a significant fraction of ACDA personnel could be classified as experts in these areas.

### MX DEPLOYMENT

Senator **Proxmire**. Dr. Adelman, General Rowney testified we must have MX deployed in a survivable mode in order to get an acceptable START agreement with the Russians.

Now that we may be deploying MX in a vulnerable mode, what effect will that have on the negotiations?

Ambassador **Adelman**. I believe that the followthrough of a U.S. deployment of an ICBM force this decade is important for incentives for the START negotiations.

I think without that kind of modernization of our land-based force that what we would be signaling to the Soviets is a pattern that we could be not talked out of, but we could relinquish strategic options by ourselves rather than in terms of negotiations and getting anything in return.

I beleve that MX deployment is important not only to follow-through as a new modernization program on the ICBM force in the decade, but also to lead the Soviets into a pattern like we should be led in, of a Midgetman kind of smaller, more capable ICBM force for the future.

Let me remind you, Senator Proxmire, that when President Reagan took office on January 20, 1981, he was faced with a situation where the Soviets were modernizing all three legs of the strategic traid, the bomber force, land-based force, and the sea-based, the submarine-based force, and the United States was not modernizing two out of the three legs of the strategic traid.

We had no production line, open production line on land-based forces. We had no production line on the bomber force. That is symptomatic of the kind of modernization the Soviets have been involved in throughout the whole SALT process and the kind of lack of modernization the United States has been involved in.

Senator **Proxmire**. Let me quote just what General Rowney said. He is our negotiator. He said this on December 8 in testimony before the Armed Services Committee, 1982.

> In short, without MX in the survivable basing mode, my chances of getting an acceptable agreement, one that takes care of our security, one which provides for deterrence, one which allows for deep cuts, one which enhances strategic arms stability, all of these possibilities are greatly undermined if we don't field this system.

Ambassador **Adelman**. The survivability of one leg of the strategic triad is an important consideration and should not be discounted.

As the Scowcroft Commission report states, there is a good interrelationship between all three legs of the strategic triad. They are mutually rainforcing. They provide for stability across the board where you would have in any one instance of one leg of the triad the possibility of vulnerability.

Therefore, since the dawn of the nuclear age there has been a U.S. decision supported by the Congress year after year for a triad and not to emphasize one aspect of the three legs.

Senator **Proxmire**. Does Rowney approve the deployment of the MX in a vulnerable silo?

Ambassador **Adelman**. General Rowney does approve the Scowcroft Commission report and moving ahead with both the MX and the Midgetman, yes.

### SMALL, SINGLE WARHEAD, MOBILE ICBM

Senator **Proxmire**. It seems like a reversal of his position to me. What arms control problems are associated with the Midgetman concept? First, is it verifiable?

Ambassador **Adelman**. As you know, the studies on that have not yet been done. Even the R&D studies on the Midgetman are in the early stages, if at all, the arms control repercussion or aspect of that would really have to be investigated in the future.

My initial feeling, though, without having done the homework necessary to come to a conclusion would be, yes, it would be verifiable.

Senator PROXMIRE. With high numbers of small missiles is the subject of breakout a consideration?

Ambassador ADELMAN. I think there is greater threat of breakout if there would be lack of limits of throw-weight of the Soviet capabilities and number of units in a warhead so there could be a possibility where the Soviets on large ICBM forces could increase the number of warheads very rapidly at one time.

Senator PROXMIRE. How many single warhead missiles would we need to substitute for our Minuteman force?

Ambassador ADELMAN. I can't answer that, Senator Proxmire. The fact is that that would have to be a Presidential decision and working closely with the Congress.

Senator PROXMIRE. Could you estimate the time when we could get sufficient numbers of the Midgetman deployed?

Ambassador ADELMAN. The estimate in the Scowcroft Commission report was early years of the 1990's.

Senator PROXMIRE. Thank you very much.

Thank you, Mr. Chairman.

Ambassador ADELMAN. Let me just say, Senator Proxmire, if I could, that the main thrust of the Midgetman, as you know, is for greater stability on both sides, to lessen the possibilities of first strike fears and first strike capabilities.

Senator PROXMIRE. I think it sounds like an improvement. It sounds very good. I just wanted to get answers to these questions.

Ambassador ADELMAN. The questions are good and they should be the third part of my category of looking down the pike on arms control.

## PERSHING II MISSILE DEPLOYMENT

Senator STEVENS. Thank you for coming this afternoon.

I am sorry that the mixup on the floor prevented me being here at the beginning of your statement. I have read it. I want to ask you just a few questions.

Could you tell me, have the Soviets become more intrasigent due to our delay on the MX and on the Pershing as far as preparations for the START talks?

Ambassador ADELMAN. In the START talks we have had serious talks. Whether the Soviets have been more intransigent because of delays on the MX, it is very hard to determine because you are asking me to determine Soviet motivation on their side.

They have not been as forthcoming as we would like or as agreeable as we would like. On the INF talks the Pershing, as I understand it, is generally being funded, by and large, through the various committees in Congress and I personally think it would be very, very damaging if at this time, this year, there were any delays in funding of that program while we are as an alliance urging the countries to go ahead in their deployment. For the United States to delay would very badly undercut the negotiations and dual track decisions and a lot of the NATO decisions that have been in force since 1979.

### FLIGHT TESTING OF MX

Senator **Stevens**. We are actually dealing with MX now under an amendment, the Hart-Tower amendment of last year, which prohibits the use of money for the basing mode and for flight testing.

In terms of that flight testing the question was raised last year on the floor that if we tested MX and we wanted to go to Midgetman later, that we might inhibit ourselves because of our desire to comply with SALT II which limits us to testing one additional ICBM, as I understand it.

Is there going to be a problem now if we proceed with flight testing of the MX and want to go on to Midgetman? Is that a realistic problem?

Ambassador **Adelman**. I don't believe it is, Mr. Chairman. As you know, the SALT II Treaty was due to expire in 1985. Any kind of testing for Midgetman would be years beyond that so there would not be that conflict.

Senator **Stevens**. If we had attempted to do it within the period of SALT II——

Ambassador **Adelman**. It would have been a new system. But there is no danger of that at this point.

Senator **Stevens**. Is there any indication that the Soviets have violated the SALT II concept in terms of testing their new ICBM?

Ambassador **Adelman**. We have concerns very much along those lines that are being investigated right now.

Senator **Stevens**. We had some testimony this morning and I think in the other hearing that this committee is conducting on MX that they have in fact tested another missile which is quite similar to the MX.

Am I in error on that?

Ambassador **Adelman**. The suspicion is, and I want to be very careful on this because some issues are classified obviously, but the Soviets have had an interest in a system like the Midgetman, although it is different, rather than the MX.

Senator **Stevens**. Is their new Midgetman system a single warhead system, the one we think they may be testing?

Ambassador **Adelman**. I know the answer to that. I just don't know the classification of it.

Let me just take a pass on that. I can tell you privately or I can tell you in closed session. I don't know on the classification what is in the public record on that point.

Senator **Stevens**. What is in the public sphere as far as the number of ICBM's that the Soviets are testing or have tested since SALT II?

Ambassador **Adelman**. The limit in SALT is 10 RV's per missile. I am not aware that there are concerns of violations in that regard.

### SOVIET VIOLATIONS OF SALT II

Senator **Stevens**. We hear about the encrypting of telemetry. Is that prohibited by SALT II?

Ambassador **Adelman**. That is one of the problems, Mr. Chairman, of SALT II, that the language is a difficult language. What SALT II says, as I remember this provision, is that either side is able to encrypt, befuddle their informaiton for missile test as long as it does not interfere with verification of the accord.

That is interesting language. What is interesting about it is who will determine whether the hidden material is important for verification of the accord? Obviously if we encrypt material, we will know what that material is that we are encrypting.

The other side obviously won't know what that material is because we have encrypted it. So, it is very difficult languge and that is one of the problems-that I personally have with SALT II that that kind of language is very confusing.

When you are trying to answer the question, that seems to be a simple question, is that provision being violated, is SALT II being violated, it gets you into very difficult areas like that one.

Senator **Stevens**. The staff has reminded me of some comments made by our colleagues concerning increasingly serious violations or at least questioning of Soviet actions which imply violations of the SALT II agreement which we understood they were living up to as far as the ICBM force is concerned.

We won't go into that, but I think we are going to have to have a hearing and get some greater information about that. It may have to be classified.

### BMD AND ABM

You mentioned that the space mission in terms of the ballistic missile defense (BMD) and the 1972 ABM Treaty prohibits the deployment of such weapons.

Where does the current negotiation point in that regard? Are we going to try to negotiate some modification of the existing agreement so that we could test space-based ballistic missile defense systems?

Ambassador **Adelman**. Mr. Chairman, we have no current plans to do that. The fact is that last year there was the 10-year review of the ABM Treaty. It was a routine matter between the Soviet Union and the United States. There are no major concerns expressed by either side nor major requests for revision of that.

The President's whole thrust is to study this matter, to look at the possibilities of greater strategic stability through defensive systems rather than concentrate entirely as we have for many years on exclusively offensive systems.

Senator **Stevens**. Where does that defensive initiative that has been mentioned by the President and others fit in with the whole START negotiating process? Is it part of it?

Ambassador **Adelman**. Right now it is not.

Senator **Stevens**. It is just R&D now?

Ambassador **Adelman**. Yes. It is a very long range. The President's speech I thought was pretty clear on this, although it has been widely misunderstood.

What he is talking about are programs at the end of the century and into the next century that might increase the capability for defensive systems.

Senator **Stevens**. Is there anything in the 1967 Outer Space Treaty or 1972 ABM Treaty which would prohibit the research for the subsequent development of a space-based defense system?

Ambassador **Adelman**. Nothing prohibits research and development I am told.

Senator **Stevens**. Thank you very much. That answers my question

### DETERRENCE

Senator **Proxmire**. I have just a couple more questions. I realize we have two other witnesses.

In your statement you say in order to deter Soviet threats, we must be able to put at risk those types of targets the Soviets seem to value the most. Back in the 1960's Secretary McNamara argued that we needed 400 warheads in order to assure destruction.

Can you quantify the amount of warheads and amount of damage that could be done to achieve deterrence now?

Ambassador **Adelman**. The theory in the 1960's was that mutually assured destruction where you would have a certain percentage of the population at risk, a certain percentage of the industry at risk, both sites would hold hostage each other's population and productive capability.

I think through the years it has become almost self-evidence that the Soviet has not structured its own society and its own capability in that regard at all.

The capability of an ABM system that the Soviets have, the SAM system, air defense capability, civil defense capability and hardening program and the way that they have designed their offensive strategic nuclear weapons are such as to raise questions in the mind of U.S. strategists as to whether the mutually assured destruction philosophy was a philosophy that the Soviets accept.

Senator **Proxmire**. Nevertheless, as the Appropriations Committee we would want to appropriate enough to provide deterrence, but we don't want to appropriate so much as to make it obviously wasteful.

So, my question was: Can you quantify the number of warheads and amount of damage that would have to be done to achieve deterrence? Can you do that?

Ambassador **Adelman**. I cannot do that.

Senator **Proxmire**. Can anybody do that?

Ambassador **Adelman**. I am sure those kinds of studies on the contingency planning and activities are done in the Department of Defense, although that would not be a primary concern to ACDA.

Senator **Proxmire**. Should we not have those studies available to us in order to determine whether we have an adequate deterrent?

Ambassador **Adelman**. I can't answer what studies the Committee would like to have from the Department of Defense.

Senator **Proxmire**. How can you conduct arms control if you don't have that? Should you not have that information available to you?

Ambassador **Adelman**. You are asking me the number of strategic targets that we would need, the capability to hit those targets?

Senator **Proxmire**. The nuclear warheads we would have to have in order to assure our effective deterrence.

Ambassador **Adelman**. In total numbers?

Senator **PROXMIRE**. That is right. As I say, the maximum figure in the 1960's was 400.

Ambassador **ADELMAN**. They were operating under a mutually assured destruction in the 1960's when a very small evident Soviet ICBM force was almost insignificant at the time.

Senator **PROXMIRE**. You are not operating on a MAD program. You must have some philosophy, some notion of what you need.

Ambassador **ADELMAN**. Yes.

Senator **PROXMIRE**. We ought to be parties to that.

Ambassador **ADELMAN**. You are absolutely right. That is done every year with defense planning documents in the Department of Defense.

Senator **PROXMIRE**. Should it not also be a cardinal part of your knowledge and understanding?

Ambassador **ADELMAN**. Our knowledge and understanding does encompass the number of weapons that are on both sides at the present time and plans for the future in order to insure that we can make reductions that are more stabilizing to the world, that are equal, that are verifiable.

Senator **PROXMIRE**. You don't have that. You just told me you couldn't give me that.

Ambassador **ADELMAN**. I thought you were talking about strategic missions.

Senator **PROXMIRE**. My question is: Can you tell me the number of warheads we need to do the job?

Ambassador **ADELMAN**. On the total number of warheads I would have to get that information. I can supply it for the record.

[The information follows:]

### TOTAL U.S. WARHEADS

This number depends on many factors, including the number of Soviet military targets, on opposing Soviet strategic forces and the survivability of the US missiles, on the number of bombers the US has deployed, and on the likely perceptions of the Soviet leaders during a crisis. We are confident, however, that the number of warheads proposed by the US in its START proposal, when combined with other elements of the proposal and our modernization program will effectively deter a Soviet attack on the US and its Allies.

### SOVIET DEFENSE SPENDING

Senator **PROXMIRE**. You discussed the Soviet investment in defense and the fact it is taking place despite economic difficulties. The result is unprecedented buildup in the nuclear forces.

Are you familiar with the CIA revised estimates of the Soviet defense spending which shows they went down from 4 percent to 2 percent annually and doesn't the evidence suggest they slowed down their expense for the defense in the second half?

Ambassador **ADELMAN**. The Soviet economy slowed in the second half of the 1970's. Defense spending did go down. As I understand the CIA estimates, their amount of increase over the long haul from the decade of the 1970's is still quite significant and in the last 20 years has been at an overall 3 to 5 percent annual growth which contrasts very much to ours.

Senator **PROXMIRE**. I asked about the 1976–81 period and CIA finding that the growth was not 4 percent, but 2 percent.

Ambassador **Adelman**. That is correct.

Senator **Proxmire**. Do you accept that?

Ambassador **Adelman**. Yes, I accept that.

Senator **Proxmire**. Do you know whether investment in strategic weapons during that period, investment in nuclear forces was slow during that period?

Ambassador **Adelman**. If I could be convinced that their growth in strategic programs was not over a period of a few years, but generally speaking was slackening off, that would be very encouraging.

Senator **Proxmire**. We have information that the Central Intelligence Agency says the Soviet Union did make the reduction?

Ambassador **Adelman**. Yes. I know it. The CIA also says and I think our intelligence community generally, that the Soviets today spend approximately three times what we spend on the strategic nuclear force. That includes the dollar equivalent or ruble equivalent and three times is a very staggering amount.

The fact is that they spend at least 45 percent more than we do on defense expenditures across the board and this kind of difference year after year after year is an enormous difference.

Today we are spending some 10 percent less in real terms on defense than we were 10 years ago whereas the Soviet Union is spending 40 percent more in real terms than they were 10 years ago. Those are big differences. They add up over time.

If the Soviet Union is slackening off in that rate of increase and that slackening is increasing year after year, that is a reassuring sign. It would be very reassuring to us and it would be very reassuring to arms control.

Senator **Proxmire**. All those figures are before the CIA figures wer provided, No. 1.

No. 2, in the Joint Economic Committee we have gone over this over and over again. We just can't seem to get—when you talk about dollars, it is one comparison. When you talk about rubles, it is something else. It is very difficult to determine.

## CONCLUSION

Ambassador **Adelman**. You have a band of uncertainty. I don't know anybody who says today that the United States and Soviet Union on strategic weapons are basically spending the same. I don't know anybody who says that the United States is spending more than the Soviet Union on strategic weapons.

I don't know anybody who is saying that the U.S. modernization is more accelerated than the Soviet's. Whether it is three times what we are spending on strategic nuclear weapons or 2½ or 3½, I don't think it is very important, myself, except for specific microdefense planning.

What I am saying is over the long haul that kind of allocation of resources produces weapons systems and capabilities on the Soviet side that are of obvious concern to American planners and American——

Senator **Proxmire**. You said the right thing when you said obvious concern. It does not necessarily mean they are superior to ours. There are other elements, too. It depends on the kind of technology you have, the kind of industry you have.

Ambassador **Adelman**. That is right. But it allows you options. It allows you modernization that lack of money doesn't allow you. In the ICBM force the Soviets have had 10 variants on 3 new ICBM missiles in the last 10 years.

We have had basically the same ICBM force and one variant on the Minuteman force. If the MX comes in and it gets approved, it will be the first new American ICBM force in 15 years or so. That is a big difference. Unless you have the dollars, you can't do that, or the rubles.

Senator **Proxmire**. Thank you, Mr. Chairman.

Senator **Stevens**. Thank you.

Thank you very much. We appreciate your coming.

I am happy to see you here. I think you have acquitted yourself very well and will do well by those of us who supported your nomination.

Ambassador **Adelman**. Thank you very much. It is nice to be here, Mr. Chairman.

# NONDEPARTMENTAL WITNESSES

## FORMER DIRECTOR, CENTRAL INTELLIGENCE AGENCY

### STATEMENT OF HON. WILLIAM E. COLBY, FORMER DIRECTOR, CENTRAL INTELLIGENCE AGENCY

### 1972 ABM TREATY

Senator STEVENS. Next we have William E. Colby, former Director of the Central Intelligence Agency, now with Reid & Priest.

Mr. COLBY. Thank you for inviting me to communicate with this committee on the issue of arms control and specifically military stragegy. Two examples, I believe, demonstrate the potential for contribution to out safety and the danger of missed opportunities.

The ABM Treaty was adopted in 1972 with the commitment of both the Soviet Union and the United States not to develop a nationwide antiballistic missile system. This followed considerable debate as to the desirability of developing such a defensive system, but agreement was eventually reached that this kind of system could be dangerous for both sides.

If one side achieved defendability against the other's nuclear missiles, it could be tempted to utilize the apparent superiority. Instead, reliance was placed upon the concept of mutual retaliation if the other side ever utilized such weapons first.

This has effectively stalemated the use of nuclear weapons in the years since. It has, incidentally, provided the side benefit of obviating the necessity for an expenditure by the United States generally estimated as something in the neighborhood of $100 billion to produce such a system.

This money would have been wasted if the other side had produced an equal system, and the mutual stalemate continued at a higher level. That $100 billion has been available for other pruposes during these last 10 years, rather than being used on something which would not have improved our security.

### ADVENT OF MIRV

The other example was the advent of the multiple independently targeted reentry vehicle [MIRV] in the late 1960's and early 1970's. Senator Edward Brooke led an effort to insure that the first SALT Agreement, finally adopted in 1972, contain a bar against such multiple reentry vehicles, limiting both sides to single warheads.

The United States was well ahead on the technology of this device and saw little reason to restrain itself from something the Soviets did not have. Thus, the subject was not included in the first SALT Agreement.

In the years since that time, of course, the Soviets have worked very hard on the subject of MRIV's, using their ability to concentrate their talent and resources as well as such espionage assistance as they could arrange.

Today the Soviet MIRV capability is the single most dangerous aspect of the nuclear equation between us, as multiple warheads on newer Soviet weapons have raised the specter of the so-called first strike against our land-based weapons.

The recent Presidential Commission on Strategic Forces has now attempted to put this genie back in the bottle by moving toward a single warhead Midgetman in the future. This would, of course, require Soviet agreement to phase out the multiple warhead in favor of single warheads. This is a case in which our strategic position would have been very substantially improved had we followed Senator Brooke's recommendation and barred the development of MIRVs on both sides.

### PROPOSITIONS ON VERIFIABLE FREEZE OF NUCLEAR WEAPONS

It is from this history, Mr. Chairman, that I come to the conclusion that the strategic position of the United States would be better off if we were to reach a mutual and verifiable freeze on the production, testing, and deployment of nuclear weapons and their delivery systems at this time. This stems from several simple propositions.

One, nuclear weapons are unusable by any responsible and rational government. The certainty of retaliation, the indiscriminate nature of the weapon and its fallout, and the inconclusiveness of the result of using these weapons makes it almost impossible to contemplate their conscious use.

Two, the arms race in these weapons is unwinable. While one nation might be a bit ahead on one aspect, such as Soviet throwweight, the other will very quickly match this and probably develop an advantage in another field. The result is a continued balance of terror at steadily rising numbers of weapons and danger of their inadvertent use.

Three, unilateral restraint is unworkable, as the Soviets would not exercise self-restraint based on U.S. unilateral restraint. Only mutual agreement can prevent the Soviets from steadily building more of these weapons and more dangerous models in the future.

Four, the resulting world will be unlivable, as it will rest upon the hair-trigger situation that technology is taking us into. We are on the verge of accidental or mistaken release of these weapons, based on technological indicators, which could only be tragic in their consequences.

### LIMITING FURTHER GROWTH OF SOVIET NUCLEAR WEAPONRY

A conscious application of arms control as a part of our strategic approach to our relationship with the Soviets would focus on the desirability of limiting the further growth of Soviet nuclear weaponry. It makes much more sense to convince the Soviets not to build some new weapon than it does to have to wrestle with defensive or retaliatory weapons on our side to deal with them.

Freezing the present arsenals and moving toward reducing them would not only give us protection against new levels of danger and threat, it would also give us resources which could be spent more effectively in the fields of real contest between ourselves and the Soviets.

In the conventional military field, there are substantial imbalances in land forces. A proper strategy should also be developed to meet the low-risk operations the Soviets have relied upon in recent years through proxies, subversives, and political manipulation.

A strategy to handle the kind of threat presented from Cuba and Nicaragua would focus on strengthening the societies threatened, a far more appropriate strategic response than building some new nuclear weapon.

The real answer to Soviet exploitation of the soical, political and economic weaknesses of the less developed world, including some nations near our borders, would better come from vigorous and dynamic programs of political, social and economic development than by purely military buildups in nuclear or conventional military forces.

We need to expand our awareness of the direct contribution to our safety which can come from dynamic growth in the Third World, not defeating Soviet maneuvers there, but making them irrelevant, as the peoples of those nations look toward the betterment that active association with programs of ours will bring.

Pragmatism in the Third World has created real results in areas as far afield as East Asia and Latin America, while idelogical conformity to Communist doctrine or Socialist panaceas has resulted in stagnation and frustration in many nations.

We have the resources, we have the wit and the will to develop strategies to meet these fundamental problems of humankind in a fashion better than anything the Soviets could offer. Arms control with the Soviets can enable us to focus our efforts on the strategies that are needed and avoid wasting our efforts on useless programs.

We need to recruit, not combat, hostile guerrillas in programs to better their societies with our help, not against our opposition.

The French, between the two World Wars, expended a great deal of treasure and effort on the development of the Maginot Line and thought themselves safe behind it. That safety was breached and circumvented within a matter of weeks and the French discovered that the German tactics that had been developed made that expensive line useless to protect France in 1940.

We must focus our efforts on the correct strategies, correct programs and the correct forces and not believe that cement and steel in a modern day nuclear Maginot Line will protect our country.

### U.S. MONITORING OF SOVIET MILITARY ACTIVITES

One last point, Mr. Chairman. You asked how arms control can improve the ability of the United States to monitor Soviet military activites.

The answer is that our intelligence will monitor such activities whether there is an arms control agreement between us or nor, because we must do so to protect our security.

Our literally fantastic intelligence capabilities provide this function today, and the recent Defense Department brochure on Soviet Military Forces shows their comprehensive coverage.

But an arms control agreement makes the process easier, both because of the numerical limits or prohibitions it sets (making it easier to focus on and identify exceptional conduct) and because of the numerous provisions incorporated in recent arms control agreements, such as non-concealment, noninterference, test notifications, declarations of forces, sensors, inspection teams and the Special Consultative Commission for the resolution of ambiguities.

While the Soviet Union will never be an open society like ours, arms control agreements and the improvement of intelligence technologies are gradually making it more visible from the outside.

Senator STEVENS. Thank you.

Do you have questions?

Senator PROXMIRE. Yes.

### U.S. INTELLIGENCE PROGRAMS

First, I would like to say, Mr. Colby, this is a superb statement. It is one of the best statements I have read, probably the best statement I have read on any issues. I had not had a chance to see it until now.

Richard Perle indicated this morning our record in intelligence estimating has been poor during periods of negotiations with the Soviet Union, that optimism for arms control spills over into intelligence estimates.

Do you agree with that assessment?

Mr. COLBY. Our estimates during the 1970's, Senator, were not very good for future projections of what the Soviets would do and develop. Our estimates were very good on what they have curently. But when we would project ahead as to what they would have in 5 years, if you look back at the record, there were some deficiencies in those estimates.

We did not over estimate their likely development. We in most cases underestimated. The most recent one was the estimate of the accuracy that their land-based missiles would improve, we first thought toward the end of the 1980's. We now find it in the middle and early 1980's.

Senator PROXMIRE. Were our estimates distorted by our optimism on what arms control would achieve?

Mr. COLBY. Not in my experience, no. They were on separate tracks. They had nothing to do with arms control.

### ADVANTAGES OF SALT II AGREEMENT

Senator PROXMIRE. Mr. Perle also testified this morning that the complexity of SALT II precluded its usefulness in the sense of allowing us to predict Soviet development.

Do you agree or is SALT II a useful tool for verification and predictive purposes?

Mr. COLBY. I think there are a number of provisions of SALT II that would help us estimate the Soviet developments, certainly to follow Soviet developments and make predictions on the future. There were a number of provisions in SALT II such as test notifications, things of this nature, declaration of forces, various steps that helped us with our estimates of Soviet forces.

Senator **Proxmire**. Mr. Colby, your statement, as I say, is very reassuring to me. One of the reasons it is so reassuring is because there are few people in our society who have had more experience with intelligence and with the problems of understanding the Soviet Union, what they are doing, and so forth, than you have.

### VERIFICATION OF NUCLEAR FREEZE

I think you are probably in as strong a position as anyone to tell us whether or not a nuclear freeze which you indicate is wise can be verified. The main argument I heard against it, at least common argument, is that the Russians would cheat, we can't tell, a comprehensive treaty of this kind is so massive that they would go ahead and produce and we would not because we are an open society and they are a closed society.

What is your answer to that?

Mr. **Colby**. I think it is adequately verifiable certainly for the main purpose of verification which is not the development of evidence to conduct a lawsuit in a court for a breach of contract. The purpose of verification is to protect our country against strategic surprise.

On that basis any substantial cheating by the Soviets would have to be so extensive if it were to have some strategic effect that we would be certain to pick it up. Now we have perfectly adequate estimates of many aspects of Soveit forces today which are not absolutely verifiable.

We can give you very good estimates of the number of Soviet tanks, number of Soviet pieces of artillery, different kinds, of aircraft, and so forth, many of which can be hidden under the barns, developed in secret places, and so forth. We don't just develop this by counting the individual trucks. We look at depots, the factories, the production rates and all the rest and we have a perfectly adequate estimate of the total.

If it is wrong, it is marginally wrong and that is what we can do with the SALT II.

Senator **Proxmire**. Supporting they had a huge underground facility turning out an enormous number of cruise missiles.

Mr. **Colby**. If they had a huge underground facility turning out an enormous amount of cruise missiles, they would have to have power, they would have to raw material, they would have to have products coming out of it which could be concealed perhaps.

We would immediately notice they were concealing something there and we would put a great deal of effort to identify what was actually going on.

Senator **Proxmire**. Do you think the deployment of the MX in existing silos will appreciably change the Soviet perception of U.S. deterrent policies and capabilities?

Mr. **Colby**. I think it has a danger, Senator, that it can make them think that we are after a first strike capability. I think the deployment of this new weapon with its potential for hard targets in the Soviet Union to me has no other reason than a first strike capability because our present weapons are certainly adequate for the deterrent capability.

Senator PROXMIRE. Your position on the MX is spelled out, incidentally, in a letter to Senator Levin which you have graciously supplied.

Mr. Chairman, I ask unanimous consent that that letter be made a part of the record.

Senator STEVENS. Without objection.

[The information follows:]

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May 9, 1983

The Honorable Carl Levin
United States Senate
Washington, D.C. 20510

Dear Senator Levin:

Thank you so very much for your note of April 28 suggesting that I might forward to you my views on the President's MX proposal. I am flattered to be asked.

My basic position on the MX comes from my belief in the need for a mutual and verifiable freeze on the testing, production and deployment of nuclear weapons and their delivery systems. There is more to be gained from such an agreement, which is in the Soviets' interest as well as ours, than from piling up new weapons on both sides. A freeze, of course, would halt both the MX and the so-called Midgetman on our side; it would also halt the two new weapons which have apparently been tested on the Soviet side.

It is, of course, essential that any freeze be the result of a mutual freeze, as a unilateral freeze on our side would not, in my view, be respected by the Soviets. The tendency, thus, is to think that we must continue to build the MX and the Midgetman unless we can secure an agreement with the Soviets to freeze. The justification stated by the President's Commission on Strategic Forces for the deploying of 100 MX missiles was apparently to convince the Soviets of our "national will and cohesion" and lead them to arms control negotiations more favorable to us than otherwise.

I find this reasoning in support of the MX to be flawed for several reasons:

A. The United States retaliatory capability is, and will remain for the foreseeable future, absolute. It is this retaliation capability that has kept the peace for many years and will continue to deter the Soviets from using or threatening to use these weapons against us. The Commission has closed the so-called window of vulnerability. Its assertion that we must have a weapon capable of destroying hardened land based military targets can only be justified if we might contemplate a first strike. Since it is clear that we have no such intention and indeed are deterred from it by the absolute retaliation capability of the Soviets, the MX is not needed to maintain the strategic stalemate which exists today. Deploying the MX in fact would give precisely the wrong signal that we are moving to create a Soviet window of vulnerability to a potential first strike, a highly dangerous message which could produce a highly dangerous reaction on their side.

B. The MX would not be sufficiently more survivable than the present Minuteman to increase our retaliation capability to any degree.

C. In this situation, it is certainly possible to say that our "national will and cohesion" will be intact if we have the wit and wisdom to maintain our current retaliatory force, while we seek a stoppage of the arms race through a freeze, rather than once again seeing the level of terror heighten on each side. In fact, I believe that our "national will and cohesion" will be better demonstrated by a decision to place our efforts on improving our ability to meet the Soviet challenge at the other levels of our competition, i.e. the conventional field and our competition in the third world. The Soviets, having been blocked by our retaliation capability from strategic adventures in recent years, have sought to use the softer and easier techniques of subversion, proxy wars and political manipulation. If we put half the national will and cohesion that are alleged to exist in the MX decision to work in these other fields, it would constitute a much more substantial addition to our overall posture with respect to the Soviet Union and its threats to our interests and allies.

As for the Midgetman, it is plain that the efforts to reverse history and achieve a MIRV ban 10 years after we failed to do so in SALT I depends on whether the Soviets will agree to it. This would certainly be a useful area of negotiations with the Soviets, but it seems equally important that it follow a freeze on the further testing, production and deployment of these weapons and their delivery systems. Stopping the present arms race is the first step that should be taken; reducing the degree of threat posed by these weapons to our safety should certainly be a follow on from that. Thus, I would certainly agree with the desirability of doing the research and development (but not the testing) leading toward a Midgetman to provide the basis for an agreement with the Soviets to replace MIRV's by single warheads on both sides, after a real attempt to negotiate a mutual and verifiable freeze on other future nuclear systems.

Many thanks for your courtesy in seeking my views. My very best wishes and respect.

Sincerely,

W.E. Colby

## BIOLOGICAL TREATY IMPROPRIETIES BY SOVIETS

Senator PROXMIRE. Why do you think the Soviets have deliberately cheated on the biological treaty? Is it a flaw in the treaty or overriding Soviet need?

Mr. COLBY. That is one of the treaties that does not have verification provisions in it. It does not have procedure for followup. It just has the flat statement that we won't do it. That is not the kind we should have. We should have one like the SALT Treaty which has a consultative commission which has various aspects to help you with the verification.

That is what I mean by a verifiable freeze agreement, that it would have that kind of provision which I don't think it would be hard to negotiate.

With respect to their experiments and their obvious attempts to use this kind of weapon and testing, I think there is a certain monentum in the Soviets society, if they think, "We can get away with it secretly", they will.

I don't trust the Russians. I think you have to watch them. The fact is that the biological one shows that we have caught them, we have caught them at this violation. If we were totally unable to verify that treaty, we would not have caught them by definition.

Senator PROXMIRE. We need compliance features in the treaty to require their abiding by the treaty and we failed to put that in.

Mr. COLBY. In that case it is just a flat statement that we will not have that kind of weapon.

## VERIFICATION PROBLEMS IN MOBILE SYSTEMS

Senator PROXMIRE. What verification problems would be created if the Soviet Union went to a system of a high number of road or rail mobile single warhead ICB's?

Mr. COLBY. It would be a problem for us to follow these around, get an adequate count of them, and so forth, but it is not an impossible one. Our intelligence capability would give us a perfectly adequate general estimate of the numbers of there for verification process.

If there is a limit on the total number, I think we would have accurate within a reasonable degree and certainly within a degree which would be strategically significant.

Senator PROXMIRE. Do you think the Soviets Union will stick with their preponderant land-based nuclear or do you think they will move to sea-based weapon systems?

Mr. COLBY. I think they will maintain their land-based unless we negotiate some reductions in them. They have been reluctant to go to sea. The Soviets Union is not a maritime nation. They are well aware that their submarine capabilities are light years behind ours.

There is a reluctance to put all their eggs in that particular basket. I do think, however, that the real danger is that by the end of this decade we may be facing a Soviets cruise missile armada and we will be engaged in a discussion in this country as to whether we should set up a massive air defense system. If we had a freeze today, that would not develop.

## SOVIET ATTITUDE TOWARD U.S. INTENTIONS

Senator PROXMIRE. Do you believe the Soviet leadership has a good handle on U.S. intentions that we do not seek a first strike, we don't seek military dominance over the Soviet Union, or are they confused, in your judgment, about U.S. policy?

Mr. COLBY. I think they know what our declared policies are, but they are not going to risk their security on a belief that a succeeding administration will have the same declared policy that this one has. They have seen variations in our different administrations. They know the Americans are quite variable in their positions on a lot of things.

The failure of SALT II, I think, raises considerable doubts in the Soviet Union as to the reliability of the United States as a negotiating partner.

Senator PROXMIRE. To what degree are Soviet negotiating positions taken with the United States because of their fear of Chinese nuclear weapon capability?

Mr. COLBY. I don't think a major degree. They do consider that as part of their problem. I don't think they or we consider the Chinese as a major nuclear threat today.

Senator PROXMIRE. Thank you again, Mr. Colby, for superb testimony. I appreciate it.

Mr. COLBY. Thank you, Senator.

## ONSITE INSPECTIONS

Senator STEVENS. Mr. Colby, I take it in terms of a mutually verifiable freeze you are not talking about on site inspection?

Mr. COLBY. I would ask for that capability. If we got it, find. But if we didn't get it, it would not be the be-all and end-all. The Russians invented the Potemkin village, Mr. Chairman. I think they could pull the wool over an inspection team's eyes without too much difficulty. I don't think that is the only thing we should rest on.

Senator STEVENS. In terms of our society versus theirs, however, if you did not have a verifiable treaty—I take it you are really talking about technological verification, is that right?

Mr. COLBY. Largely, yes. I am talking really, Mr. Chairman, about the concept of central intelligence which brings all the relevant information into one place, the technological, the overt information, the reports of our Embassies, attaché, and such espionage as we are able to conduct. That is not something that should be totally dismissed.

A Soviet officer a number of years ago was so repelled by what he considered the irresponsibility and the danger of Mr. Krushchev and the people around him that he made contact with us to give us some very important secrets about the Soviet nuclear policies.

If we were in a freeze with the Soviet Union, highly touted by the Soviet Union and ourselves as a great new step in stability between our two nations and then the Soviets developed the size of cheating program that would be necessary to have any kind of substantial strategic effect, then I think you could count on a few Soviet citizens having a crisis of conscience in that group. At least the Soviet leaders would have to count on that possibility.

### SOVIET ARMS TREATY VIOLATIONS

Senator STEVENS. We had one of our Senators catalog a whole series of potential arms treaty violations that are going on right now by the Soviets, including development of two new types of ICBM's, testing new mobile air defense systems as part of a nationwide antiballistic missile defense system that is forbidden by the 1972 treaty, concealed deployment of land mobile SS–16 missiles, underground nuclear tests of up to 250 kilotons of explosive power in excess of the 150-kiloton limitation imposed by two treaties, rapid reload and refire exercises of the SS–18's and stockpiling of other missiles circumventing the limit of the missile launchers, deployment of long-range air-to-surface cruise missiles, the Bear intercontinental bomber and Backfire increasing their intercontinental attack capability, although it is classified as a medium-range bomber, a total encryption of telemetry data associated with testing of all significant missiles. The problem is that no one believes it.

Mr. COLBY. No one believes the Soviets.

Senator STEVENS. No one believes our Senators. The real problem is that the intelligence community knows it. Those who get secret briefings know it, but the country does not know it because we rely exclusively on intelligence activities to tell us whether or not the Soviets are violating the treaties.

Unless you can have onsite inspection by people who are not experts in the intelligence field, how are we ever going to get the American public to come onboard and believe it?

Mr. COLBY. I think there are ways for committees of this Congress to receive classified information from the intelligence community, find out what the intelligence community's true assessment of that is, and then be able to release the overall results, not the details, not the sources, but the results.

The two missile tests, I gather, I have not had access to classified material in recent years, Mr. Chairman, but I gather from the press that there is a legitimate question as to whether there are two new missiles or one new one and a modification of an existing one.

I don't know the details of how that comes out. The intelligence community presumably could brief you as to which they think it is and you would be able to say either that they had tested two or that they had tested one and a modification or that you weren't quite sure yet and you are going to look into it very sharply.

Senator Stevens. I don't want to prolong this.

I join Senator Proxmire in congratulating you on an excellent statement. I remember well Ed Brooke's attack on the multiple warhead and was associated with him at that time in that regard.

I also believe that the problem is that no one really understands the capability of their system to secret the information as compared to ours. We just don't seem to have the ability to secret information.

Mr. COLBY'S. We are not in the same ball park, Mr. Chairman.

Senator STEVENS. I am sure I like that too much in the long run. The real problem with the verification of any freeze on production is that it has to be believable. Then even if it is believed, I remember my history of the limitation after World War I on the size of the battleships and the armaments and the fact that there were open violations by both Japan and Germany and the world knew it.

Mr. Colby. And nobody did anything about it. I think you are onto a valid point, Mr. Chairman. I think the present treaties largely say either that they are totally followed or they are violated. There is no sanction and no interim sanction put in.

I think there is ground for negotiating some interim sanctions such as a determination by a neutral group or a third party such as a demand for inspection upon suspicion, that sort of thing, such as a reciprocal violation by our side of violation on the other side, but not the destruction of the entire treaty.

Just a conscious set of sanctions for incremental violations of the treaty. I think that kind of thing could be worked out to a degree.

Senator Stevens. I for one would like to see a movement publicly from their community in Russia supporting a similar kind of freeze and demand for inspection on our shores. I think we would grant it rapidly. I don't see any mutuality in the freeze demand.

I notice you used the words "mutual" and "verifiable." I commend you for the way you have said it, but there does not seem to be mutually on the freeze proposition as far as the world is concerned. They impose a freeze on us without regard to whether the Russians do or not.

Mr. Colby. I would not accept that. I would consider a freeze on both sides. The argument is whether it would freeze them into a position of superiority. I respectfully differ with the President on this. I do not see any usable superiority at this time.

They might have a few more of this and we might have a few more of that, but neither side is able to break through the stalemate. Why not stop.

Senator Stevens. Thank you very much, Mr. Colby.

Mr. Colby. Thank you, Mr. Chairman.

## The Arms Control Association

### STATEMENT OF DR. WILLIAM H. KINCADE, EXECUTIVE DIRECTOR, THE ARMS CONTROL ASSOCIATION

Senator Proxmire. If I might, I would like to introduce the last witness. He has served in the Senate. Let me welcome you back to the Senate, Bill, at this time in a slightly different capacity.

Mr. Kincade for several years was staff director of the Joint Committee on Defense Production. He has arranged committee hearings such as this one. He is executive director of the Arms Control Association.

We welcome him warmly. Now he is on the side of the questioning, he undoubtedly will find answering more difficult then drafting.

### PREPARED STATEMENT OF GENERAL GOODPASTER

Mr. Kincade. Thank you very much, Mr. Chairman.

Senator Proxmire. General Goodpaster wanted to have his statement submitted for the record. He could not stay.

Senator Stevens. That will be granted.

[The statement follows:]

# PREPARED STATEMENT OF GEN. A. J. GOODPASTER (U.S. ARMY—RET.)

I welcome the opportunity to speak to this committee on arms control as a military strategy (or more broadly, as a security strategy in its military aspects). My interest goes back many years. During the 1950's, it was one I shared with President Eisenhower, when I was a staff assistant to him with interests in this field. His interests were manifested repeatedly, for example in his Atoms-for-Peace proposal, his Open Skies proposal, his constant efforts to lower the military components of US/USSR relations, his appointment of Governor Stassen as his Special Assistant for Disarmament, and mant other actions. During the 1960's, while serving as assistant to the Joint Chiefs of Staff, then as Director at the Joint Staff and later as Commandant of the National War College, I was again concerned with these issues. Following my retirement as SACEUR, while serving at the Woodrow Wilson International Center for Scholars and subsequently as Professor of Government and International Studies at the Citadel in Charleston, S.C., I included a treatment of these issues in my book, "For the Common Defense," published in 1977. Since my retirement on leaving West Point in 1981, I have participated in several major studies conducted, among others, by the Atlantic Council of the United States, and the Carnegie Panel on U.S. Security and the Future of Arms Control.

I will address the very cogent questions set out in the letter to me from your committee:

"What specific military and/or budgeting benefits would flow from capping and ultimately reducing the nuclear arsenals on both sides?"

"How can arms control maintain and improve the credibility of the U.S. strategic deterrent?"

"How can arms control prevent U.S./Soviet military competition from spilling over to new technological arenas?"

"How can arms control maintain U.S. defense expenditures within limits of economic and political acceptability?"

"How can arms control improve the ability of the United States to monitor Soviet military activities?"

First, to lay the groundwork for my responses, I suggest (as I did in my book) that we should see arms control as one of the three major lines of policy to provide for the basic security of our people, our territory and our free institutions, the other two policies being defense and deterrence. In formalising security policy and establishing military programs, I have long favored an approach that begins with consideration of our national values that are exposed to outside international threat, identifies from these our specific major interests that require security protection, develops security policies designed to safeguard such interests, and designed to safeguard such interests, and designs military programs best suited by role and posture to carry out such policies, safeguard such interests, and protect such basic values.

The three main policy paths to security that I identify are, as I mentioned, defense, deterrence, and arms control. By defense, I refer to actual war-fighting capabilities; by deterrence—our primary policy—to dissuading the Soviet Union through the costs, risks and uncertainties that confront them from using force against us or our allies, or from using the threat of force for purposes of intimidation, coercion or pressure-tactics to extract concessions; by arms control, limiting and reducing the forces threatening each other, lessening instability, dangers of miscalculation and uncontrolled escalation or risks from issues arising in third areas.

I put particular emphasis on stable security—safety, freedom, peace, confidence—and it is in giving added stability that I think arms control can especially contribute not only through quantitative and qualitative controls, but also through the so-called confidence-building measures associated with arms control.

Arms control measures can strengthen the stability of the deterrent by precluding technological changes that would erode it; they can also strengthen operational or crisis stability by eliminating or reducing those weapons whose vulnerability and threatening potential tend to put us in a hair-trigger response situation, and, also can strengthen program (as arms-race) stability, by halting (or curbing) the tendency toward adding more and more weapons, of greater and greater power and accuracy to both sides.

One final general point: it is fair to say, I believe, that the mutual interest shown by the U.S. and the USSR has been greatest by far in the strategic nuclear field, where the devastating effects of nuclear conflict could be so immediate and immense; somewhat lesser at regional level though still significant—the CSCE agreement reached several years ago, the MBFR negotiations proceeding very slowly, but now the INF negotiations proceeding seriously in Geneva. The Soviets have shown little interest in any serious arms control efforts in regard to other areas of the world—in fact, they insist on "no ideological peaceful coexistence" and on continued "just wars of liberation," in their self-serving terminology. They did, however, join in agreement several years ago to avoid provocative, threatening or harassing naval tactics on the high seas—and this has resulted in a more responsible standard of naval behavior.

Drawing on this background, let me now take up the four specific questions:

1) How can arms control maintain and improve the

credibility of the U.S. strategic deterrent?

A cap on these forces, and especially a shift to reduced balanced levels of weapons of the less destabilizing kind—such as SLBMs and single-warhead ICBMs—would strengthen the credibility of the deterrent, and the confidence in it in the minds of the people of the United States and allied nations. Likewise, it would be dissuasive to the Soviets as a stable counter to their own force, clearly not implying a threatening attempt on our part to achieve anything like a first strike superiority. Both sides could breathe more easily. Such a reduced, balanced, stable force would reduce the chances that miscalculation could cause the launching of the nuclear force. Although in my opinion neither side has today, or can conceivably acquire, a full first-strike capability, concern over a substantial first-strike has a significant destabilizing effect, especially as regards the vulnerability of ICBMs.

2) How can arms control prevent U.S./Soviet military competition from spilling over to new technological areas?

Here I suggest we should concern ourselves in particular with new technologies that would serve to erode the deterrent or make it less stable, or be especially hard to verify. A past example is the MIRV which—now that both sides have them—works against stable security, since it puts a number of warheads of the attacked force (on a single target) at risk to one or two attacking warheads. Any future anti-submarine measures that posed a major threat to SLBM forces at sea (if such should be developed) would have destabilizing effects. The new defensive concepts recently proposed for examination at the R&D level by President Reagan should be closely studied as to their implications for stable security. I would hope that it would be possible, if they prove militarily feasible and effective, to incorporate them in ways, and under agreements, that would avail ourselves of this stabilizing effect, and at the same time limit or preclude any applications that would be de-stablilzing. A searching examination of these issues should have high priority with both ACDA and the Defense Department.

3) How can arms control maintain U.S. defense expenditures within limits of economic and political acceptability?

People are often surprised to find how small a fraction of the military budget is devoted to strategic nuclear forces—generally in the range of 10 to 15%. Nevertheless, in absolute terms we are still talking in excess of $25 billion a year, and the introduction of new weapons can run in the range of $35-50 billion additional 10-year costs. An orderly, steady program of replacement, modernization, improvement of reliablilty, and overcoming of threats such as EMP makes good sense, and will give our people confidence that their money is being spent in ways that safeguard their safety and freedom wisely and prudently.

4) How can arms control improve the ability of the U.S. to monitor Soviet military activities?

Here, I suggest our concern should be with those activities that are potentially threatening to U.S. and allied security, as well as monitoring for verification of of adherence to agreements (and to give confidence in the adequacy of verification. The so-called confidence-building measures can be useful in avoiding miscalculation over troop movements and military exercises—land, air or naval—which involve movements as changes in readiness that in themselves could appear highly threatening. There is, of course, another side to this: the measures could be used to create a false sense of security, thus enabling an aggressor to exploit the inherent integrity that exists over true intentions in order to achieve the kind of surprise the Egyptians achieved in 1973 against Israel, the Russians in 1968 against Czechoslovakia or the Polish government against their own people in December 1981. Nevertheless, the agreements are valuable. The Standing Consultative Committee established by the United States and Soviet Union under the SALT agreements is serving well, according to my understanding. The value of provisions is well shown, I believe, by their lack in the case of treaties relating to chemical and biological weapons and operations where Soviet violations have been reported, but have not been resolved, nor has corrective action been taken.

I would like to conclude by recommending to your committee three studies with which I Have recently been associated:

(1) Challenges for U.S. Security: The Soviet Approach to Arms Control; Verification; and Problems and Prospects—by the Carnegie Panel on U.S. Security and the Future of Arms Control.

(2) Arms Control, East-West Relations and the Atlantic Alliance: Closing the Gaps—by the Atlantic Council's Working Group on Arms Control.

(3) Strengthening Conventional Deterrence in Europe: Proposals for the 1980's-Report of the European Security Study—(for release on May 16, 1983.)

### MILITARY UTILITY OF ARMS CONTROL

Mr. KINCADE. Thank you for inviting me to address this committee on so crucial a topic as the military utility of arms control. There is a very high prospect of these proceedings becomes one of the landmark hearings of the current period in American security policy.

Although I am the executive director of the Arms Control Association, I should point out that I am speaking today as a specialist in security policy and not as a spokesman for the association. The views I express are my own.

I would like to submit my full testimony for the record and abbreviate my remarks.

There are two aspects to the question raised in such a timely way by this subcommittee, though one aspect is included in the first. The primary issue is: What can arms control contribute to our security? That must be the first test of any arms control proposal, policy, agreement or regime.

Centrally, but not exclusively, involved in this issue is the additional question: What can arms control contribute to the military dimension of our overall security policy? Yet the discussion here will be understood, I trust, in the context of the larger question of how both arms and arms control do or do not enhance our security.

One of the major aims of arms control has been to negotiate answers to this basic questions of how much is enough, answers which will meet the basic interests of the negotiating parties in avoiding, on the one hand, a nuclear war that stands a good chance of effectively terminating both the separate values and the competition of the antagonists or avoiding, on the other hand, economic exhaustion.

As Gen. Richard H. Ellis said 5 years ago while Commander of the Strategic Air Command:

> The best hope for the future is through SALT—a negotiated arms limitation agreement and a subsequent reduction of forces. To me, the alternatives are unacceptable; Appeasement, economic exhaustion resulting from an arms race, or a nuclear holocaust.

Nothing has occurred that would change the basic military wisdom of that statement.

### MILITARY PLANNING

To understand the military utility of arms limitation requires a basic knowledge of military planning. Contingency planning begins with an assessment of the seriousness and likelihood of various conceivable threats. Both aspects of the threat assessment—severity and probability—are important.

Most planners, even very conservative ones, tend to regard the probability of a Soviet nuclear strike on the United States or its allies as low or very low. But the severity of an attack of this kind would be such that it cannot be ignored despite its improbability.

The threat assessment depends vitally on two elements: The growth potential, either in numerical or performance terms, of the adversary's forces and the adequacy of our information on current and projected adversary forces.

Here it is important to underscore that the military planner is generally much less concerned with current adversary capabilities than with future developments and that defense budgets are much more shaped by estimated future capabilities than by an opponent's posture today.

The purely military role of arms limitation, then, is a twofold response to the problem of the strategic planner. It is to bound or constrain, and if possible reduce, the threat which the planner or decisionmaker faces and must budget for.

And it is to improve the quality of the information on which the planners' estimates are based. Effectively practiced, arms limitation can substantially improve the predictability, calculability, and orderliness of the future military or threat environment.

This, of course, is not only highly beneficial to the military planner and to our overall security. It is also of considerable value to his often skeptical collagues, the budgetmaker and the political decisionmaker. Arms control can thus help to reduce the friction and disagreements among these frequently conflicting contributors to security policy.

The distinguishing characteristics of the future conflict environment thus appear to be, first, greater overall vulnerability and, second, a much higher degree of information uncertainty owing to both changes in weapons technology and to the problems associated with new information technologies.

## FIRST-ORDER AIM OF ARMS CONTROL

A first-order aim of arms control is, therefore, to bound these developments in such a way that both military and political leaders are facing crisis or conflict situations that do not outstrip their capacity for control.

To put it another way, arms limitation has an important role to play in reasserting effective political and military control over the technologies that are rapidly entering arsenals, but are loosening our control over the fateful decisions connected with crisis and conflict.

This summary has not addressed other and equally important contributions which arms control can make to our military capability, such as limiting the proliferation of nuclear or highly sophisticated conventional weapons. Such proliferation can only increase the threats our planners must face, strain the budget resources we have for maintaining our security, and tax the ability of our armed forces to perform their missions.

The need, therefore, is for greater and more genuine attention to arms control as a central element in our security policy. An intensified and widening technology duel with the Soviet Union has, over the past several decades, only reduced the reality and perception of security.

In dealing with the consequences and the future of this competition, arms control will not only be helpful to our military interests, it will be essential to them.

But the timid, go-slow, rhetorical overstudied but underpowered approach we have taken toward arms control has made it increasingly difficult to achieve effective negotiated security agreements.

Arms control can play an extremely important role in our specific military and general security policy, but only if we get on with the job.

### U.S. MILITARY POSTURE

In concluding, I would like to point to a distinctive but little marked feature of the contemporary scene. We see on the left, right, and the center of the political spectrum enormous dissatisfaction with our military posture, with our weapons procurement system, and with our military doctrines and plans.

We see a great strategic ferment, with proposals of every kind—from 50-percent reductions in forces to the farfetched fantasy of a perfect defense in space—emanating from every quarter. Not since 1945 have so many people been engaged in speculating on what we ought to do next to save ourselves.

This condition of concern and dissatisfaction has been described as the breakdown in the postwar Western security consensus. And that is partly true. But, more importantly, it is the reflection of a major technological transition, a period when our capacity to inflict damage has outrun any ideas we have for rationally employing or sensibly directing such capacity.

At the same time, it is a tacit admission that the problem of assuring security can no longer be solved primarily by military means, if, indeed, it ever could. We have run out of satisfactory military answers for the security dilemma.

I believe that is the burden of some of the important testimony you have heard today from former officials. One would have to look very hard to find a precedent for so many distinguished—as you have heard earlier—men with long professional experience in the security field calling for arms limitation to restore the control over our national survival that is fast eluding our grasp.

Their message has largely been that we can afford neither the economic costs nor the risks to security implied by business as usual, by more of the same. Pundits may say that this is largely a reaction to the policies of the current administration.

I would argue, instead, that it is at least equally a belated recognition of the gap between security requirements and purely military answers that has prompted this call to arms control. We must hope that there is still time to answer that call.

Thank you very much, Mr. Chairman. I am ready to answer any questions you may have.

[The prepared statement of Mr. Kincade follows:]

# PREPARED STATEMENT OF DR. WILLIAM H. KINCADE

EXECUTIVE DIRECTOR

ARMS CONTROL ASSOCIATION

Mr. Chairman, members of the Committee, thank you for inviting me to address this Committee on so crucial a topic as the military utility of arms control There is a very high prospect of these proceedings becoming one of the landmark hearings of the current period in American security policy.

Although I am the executive director of the Arms Control Association, I should point out that I am speaking today as a specialist in security policy and not as a spokesman for the Associations. The views I express are my own.

It may be of interest to this panel to observe further that I came to the questions of arms and security as an officer in the U.S. Navy, where I specialized in the Soviet navy for eight years of active service and seven years in the active reserve. That experience determines my views of what arms control can, and indeed must, contribute to our nation's security in the nuclear age.

There are two aspects to the question raised in such a timely way by this subcommittee, though one aspect is included in the first. The primary issue is: what can arms control contribute to our security? That must be the first test of any arms control proposal, policy, agreement, or regime.

Centrally, but not exclusively, involved in this issue is the additional question: what can arms control contribute to the military dimension of our overall security policy. This hearing is an inquiry into the specific military utility of arms limitation and reduction. Yet the discussion will be understood, I trust, in the context of the larger question of how both arms and arms control do or do not enhance our security.

A point that is often misunderstood in this connection is that modern deterrence theory and modern arms control arose from the same postwar dilemma: assuring the survival of our values in a world that contains both weapons of mass destruction and persistent political hostility and competition. Arms control and nuclear deterrence have been tied to one another for nearly 40 years and have been pursued by American presidents throughout that period, though at times more for public relations effect than for serious security objectives.

Nevertheless, the pursuit of arms control is an integral part of a strategy of deterrence. The reason for this is that deterrence is fundamentally a strategy of influencing the perceptions and decisions of individual leaders or groups of leaders whose intentions and decision-making processes we do not know very well and cannot predict very accurately in the future. It is thus a psychological strategy as much as a military one. As such, there are no self-limiting ordinances in a policy of deterrence; it is an open-ended strategy that does not contain any self-evident answers to the question of 'how much is enough?'

One of the major aims of arms control has therefore been to negotiate answers to this basic question, answers which will meet the basic interests of the negotiating parties in avoiding, on the one hand, a nuclear war that stands a good chance of effectively terminating both the separate values and the competition of the antagonists or avoiding, on the other hand, economic exhaustion. As General Richard H. Ellis said five years ago while Commander of the Strategic Air Command:

> ...the best hope for the future is through SALT--a negotiated arms limitation agreement and a subsequent reduction of forces. To me, the alternatives are unacceptable: appeasement, economic exhaustion resulting from an arms race, or a nuclear holocaust.

Nothing has occurred that would change the basic military wisdom of that statement.

In an earlier period, when the United States enjoyed considerable numerical and technological superiority in nuclear weapons over its major rival, the Soviet Union, we could afford a more relaxed, more rhetorical approach to arms limitation.

Now that the Soviet Union has gained a comparable nuclear arsenal and a much improved technological base--as was predicted would occur twenty-five years ago when policymakers first began to treat arms control as a serious security option--the need for arms limitation to enhance U.S. security is much more urgent.

There is no warrant in postwar history for believing that the Soviet Union can be coerced by U.S. nuclear build-ups into winding down its own weapons production. Indeed, the evidence supports the contrary view. When the U.S. had overwhelming numerical and technological superiority in nuclear weapons, this did not deter the U.S.S.R. from catching up. Now that approximate parity has been reached, it is even less likely that the Soviet Union will sit still while the U.S. seeks a marginal increment of nuclear superiority in qualitative or quantitative terms.

Ther is another, growing incentive for negotiated security. A quarter century agao, when our baseline nuclear forces were laid down, nuclear weapons were comparatively inexpensive. They gave us a "bigger bang for the buck." The degree of our reliance on nuclear weapons is, in fact, partly a product of the national desire for the greatest possible deterrent at the lowest possible price. This led successive presidents, the Congress, and the public to support a policy of deterrence on the cheap.

Today, however, nuclear weapons are much more expensive and technological advances do not come so easily or cheaply. Just compare the life-cycle costs, unit costs, or research and development (R&D) costs of the Minuteman and MX missiles, the Polaris and Trident submarines, or the B-52 and B-1 bombers. We are now paying a much higher premium for a much smaller incremental increase in nuclear firepower. In other words, the economic or budgetary incentives for arms control are greater than ever before. Though the defense budget share for strategic forces remains less than spending for other military purposes, the U.S. can no longer purchase nuclear deterrence on the cheap.

A further strategic incentive for arms limitation and reduction stems from the changing character of weaponry. The past twenty-five years of more or less stable U.S nuclear force budgets and of continuing arms control negotiations have been possible largely because of technological advances in independent surveillance capability. This technical progress allowed us to know with a remarkable degree of precision and confidence the nature of the nuclear threat, current and projected. Over the next ten years, the arsenals of the superpowers will shift to weapons--small, versatile, reloadable cruise missiles; mobile ballistic missiles; 'stealth' aircraft and missiles; and other highly ambiguous or concealable systems--that will outstrip future advances in surveillance technology. Arms limitation could constrain these developments so disadvantageous to American security and sound defense planning.

This review suggests current military problems to the solution of which arms control can make a contribution. The specific utility of arms limitation is well spelled out in the April 1983 Report of the President's Commission on Strategic Forces. This study regrettably comes to some conclusions on strategic weapons that represent neither sound strategic planning nor sound arms limitation policy. Nevertheless, its description of the military usefulness of arms control (p. 3) is as good as it is brief:

> Arms control can: reduce the risk of war; help limit the spread of nuclear weapons; remove or reduce the risk of misunderstanding of particular events or accidents; seal off wasteful, dangerous, or unhelpful lines of technical development before either side gets too committed to them; help channel modernization into stabilizing rather than destabilizing paths; reduce misunderstanding about the purpose of weapons developments and thus reduce the need to over-insure against worst-case projections; and help make arsenals less destructive and costly.

Where this report erred was in its heavy emphasis on international illusionism as the predominant criterion for sizing and shaping U.S. nuclear forces, particularly land-based intercontinental ballistic missiles (ICBMs). That is clearly a recipe for greater risks and greater costs. If we pursue any further than we already have the notion that the primary rationale for our force posture is to send carefully modulated signals and create subtle impressions with these very blunt and ambiguous instruments, rather than to make simple statements or perform essentially military missions, then we will be on a very slippery slope indeed.

This is not to deny that force posture and weapons programs influence allied and adversary perceptions. They undoubtedly do. Nor is it to deny that creating appropriate perceptions --such as our willingness to use nuclear weapons, if threatened with them--is an important goal of deterrence strategy. What is objected to is the simplistic idea that credibility or resolve can be communicated only by weapons production and force modernization. Or that the complex messages we intend to convey by these cumbersome means will be received and understood exactly as they are transmitted. The history of military-technological innovation is strewn with examples of efforts to shore up deterrence through showy building or innovation programs that backfired and led either to conflict or to a costly but unproductive intensification of the weapons competition.

To understand the military utility of arms limitation requires a basic knowledge of military planning--knowledge that is easy to acquire but largely ignored in our society. Military contingency planning begins with an assessment of the seriousness and likelihood of various conceivable threats. Both aspects of the threat assessment--severity and probability--are important. Most planners, even very conservative ones, tend to regard the probability of a Soviet nuclear strike on the U.S. or its allies as low or very low. But the severity of an attack of this kind would be such that it cannot be ignored despite its improbability. After all, the Soviet Union is the only nation on earth capable of serious damage to the U.S. homeland.

The threat assessment depends vitally on two elements: the growth potential, either in numerical or performance terms, of the adversary's forces and the adequacy of our information on current and projected adversary forces. Here it is important to underscore that the military planner is generally much less concerned with current adversary capabilities than with future developments and that defense budgets are much more shaped by estimated future capabilities than by an opponent's posture today.

The purely military role of arms limitation, then, is a twofold response to the problem of the strategic planner. It is to bound or constrain, and if possible reduce, the threat which the planner or decisionmaker faces and must budget for. And it is to improve the quality of the information on which the planners' estimates are based. Effectively practiced, arms limitation can substantially improve the predictability, calculability, and orderliness of the future military or threat environment.

This, of course, is not only highly beneficial to the military planner and to our overall security. It is also of considerable value to his often skeptical colleagues, the budgetmaker and the political decisionmaker, both of whom are represented on this committee. Arms control can thus help to reduce the friction and disagreements among these frequently conflicting contributors to security policy.

Regarding the role of arms control in preserving the credibility of the national nuclear deterrent, the present danger is not one of undermining its persuasiveness but rather of overemphasizing our willingness to use it to the point of encouraging someone else to shoot first in the mistaken belief that doing so is the lesser of two evils. Arms control can help to damp down the kind of desperate fear that arises from overpreparedness--which is as real a threat to deterrence as is the invitation to aggression arising from underpreparedness.

In terms of maintaining an adequate impression of resolve, the more efficient and appropriate instruments at today's level of nuclear forces lie not so much in military hardware as in firm, self-confident diplomacy and foreign policy. We will do more to bolster our image of resolve by effective foreign policy than by simpleminded searches for hardware 'fixes' to what are essentially politically problems.

Indeed, mindless investments in armed forces as the only answer to the modern security dilemma are the hallmark of a fearful, unconfident, and bankrupt security policy which attempts to substitute for effective foreign policy crude military strength. Russia is a prime example; it should not be emulated.

Though arms control can also help to constrain defense expenditures, especially over the long term, it would be wrong to expect too much in the way of an immediate bonus from negotiated security agreements. Such agreements are not without risk, though the risks are less than those of an unrestrained technology duel. To hedge against such risks, it may be necessary to pay the price for a technology base that is producing fewer deployed weapons but remains ready to surge, if required. Some believe it may be necessary to bolster other sectors of the military--manpower strengths or specific conventional forces--if only to retain the public confidence in the overall security situation, confidence that is essential to sustaining the arms limitation process.

Additionally, some of the weapons most inimical to effective arms control--especially those less amenable to surveillance--are in principle cheaper than weapons with a more benign arms control impact. If we consider arms limitation essential to a thoroughgoing security policy, we must be ready to pay the price for more controllable, if more costly, arms.

Nevertheless, arms control can produce, and already has produced, budgetary savings in the form of foregone expenditures. The savings from the cap on strategic defensive systems embodied in the ABM Treaty of 1972 are an excellent case in point. Further such savings could be expected from limiting anti-satellite weapons and other space armaments and from limits on earth-bound technologies.

It is a grave mistake to believe that arms control and budget reductions are necessarily highly related or are totally compatible goals. They are not. Much greater immediate defense savings can be relized from rationalizing our procurement system and from better technological choices. Yet we can expect expenditure avoidance from arms control in the short term and more direct budget reductions in the longer term.

Negotiated security agreements could also help to keep the defense budgets now planned for the next five years closer to the historical limits of economic and political tolerance. These limits have recently been strained, if not punctured. Yet thirty years of U.S. public opinion polls show that they cannot be strained for long. In both of the major postwar rapid surges in defense spending--following the outbreak of the Korean War and during the sputnik-missile gap budget stimulus--public tolerance for high levels of defense spending lasted about two years.

Support for the current defense budget is already crumbling. As it erodes further, it is highly likely that the services will be unable to meet the installments on the many systems for which the downpayments are now being made. As a result, we will get very uneven, and perhaps in some areas inadequate, forces. Arms control could help to damp down the procurement swings that have historically made U.S. force development so uneven. Had arms limitation been pursued more consistently and effectively in the last decade--during which time the U.S. has ratified none of the nuclear arms agreements which it has negotiated--we would undoubtedly be enjoying the benefits for other critical defense programs of foregone expenditures in strategic nuclear weaponry.

In a very dynamic technological era, a major function of arms control is to contain the effects of that dynamism. It permits security policy to be made more sensibly and deliberately, without constant (and often unwarranted) fears and alarms about technological surprises and without a continuous see-saw of offense and defense that makes weapons obsolete almost the moment they are deployed.

The Report of the President's Commission on Strategic Forces emphasizes the strategic wisdom of avoiding the development of highly lucrative strategic targets in the form of highly MIRVed, fixed-base ICBMs. This is a position which many arms control specialists recommended nearly fifteen years ago. As Table I reveals, the process of MIRVing undertaken by both superpowers has reduced the American advantage in warheads and heightened the potential vulnerability of both nations.

Table I: MIRVing and the Diminishing U.S. Warhead Lead

| Year | U.S. | U.S.S.R. | U.S. Lead |
|---|---|---|---|
| 1971 | 4600 | 2100 | 2500 |
| 1972 | 5700 | 2500 | 3200 |
| 1973 | 6784 | 2200 | 4584 |
| 1974 | 7650 | 2500 | 5150 |
| 1975 | 8500 | 2500 | 6000 |
| 1976 | 8400 | 3300 | 5100 |
| 1977 | 8500 | 4000 | 4500 |
| 1978 | 9000 | 4500 | 4500 |
| 1979 | 9200 | 5000 | 4200 |
| 1980 | 9200 | 6000 | 3200 |
| 1981 | 9000 | 7000 | 2000 |
| 1982 | 9270 | 7340 | 1930 |
| 1983 (est.) | 9650 | 7800 | 1850 |

(Note: Figures are used to show trends in U.S. warhead advantage and should not be regarded as definitive, owing to rounding and to the use of "SALT count" which overcounts bombs and re-entry vehicles (warheads) on heavy bombers and on intercontinental-range ballistic missiles. FB-111 and Backfire bomber weapons loads excluded from totals.)

What is needed, to avoid such technologically unrewarding experiences, is a combination of better technological foresight and preclusive arms limitation. By preclusive arms control is meant agreements which geographically, numerically, or technologically constrain the deployment of weapons to which neither side has become irretrievably committed. Examples of preclusive arms agreements now in effect are the Antarctic, Outer Space, Seabed, and ABM treaties.

It would have been much easier to limit the vulnerability caused to all nuclear powers by the process of MIRVing had a MIRV testing ban or a numerical limitation on MIRVs been imposed when these measures were first recommended by several U.S. Senators and by arms control specialists in the late 1960s. It will be infinitely more difficult, if not impossible, to carry out the process of deMIRVing implied by the President's Commission on Strategic Forces. There remains time, however, to avoid repeating such strategic mistakes in areas such as anti-satellite weaponry or directed-energy weapons.

Arms limitation has the potential, as noted above, to assist in maintaining the quality of our strategic intelligence by placing limits , not only on the numbers of adversary forces, but also on certain activities they may carry out in relation to these forces, such as tests, improvements, and modifications. It is far easier to monitor forces when such constraints are in effect. Indeed, setting aside any specific arms control benefits, our strategic intelligence will suffer considerably if observance of the SALT II agreements is not continued or another limitation treaty is not negotiated to replace it. Many, if not most, of the provisions of the SALT II agreements related precisely to making Soviet strategic forces more visible to U.S. monitoring technology. Our intelligence position cannot be improved by eliminating the many 'cooperative measures' and other constraints pioneered in the SALT II agreements.

Looking more towards the future, the likely developments in military technology strongly suggest that the security and military benefits of arms control will increase substantially.

Military technology is proceeding along three historic axes: (1) the increasing scope of military operations, which now allows for global warfare and may in time permit space warfare; (2) the increasing intensity of destruction from modern weaponry; and (3) the increasingly rapid tempo or pace of military operations.

Changing technology affecting each of these areas is making for far more vulnerable targets of every kind, as well as aggravating the already problematic question of effective war control. Strangely, in the United States, we have been concentrating on the relatively remote and hypothetical vulnerability of hardened missile silos, while ignoring, at least until very recently, the wholesale increase in the vulnerability of targets of other kinds, such as command and control centers or point industrial facilities and transportation/distribution systems.

The overall contribution which these other targets make to military capability is far greater than that made by land-based ICBMs. Indeed, if we could assure the survival of the ICBM silos, yet continued to ignore the vulnerability of the aforementioned facilities, we would be increasing the incentives for an attacker to strike just these facilities.

This only points up the fact that, in an age of highly mature projectile weapons, vulnerability is increasing on all sides. Our condition in the U.S. today is, and will tomorrow be even more, like that of our European allies--living within the range of large numbers of very effective weapons.

Another important factor in the future military environment is the influence of the information revolution that has been taking place for some years now. This has contributed greatly to weapons accuracy and target vulnerability. It has also made it possible to conduct military operations much more rapidly over a much greater expanse. The revolution in information technology may be the single greatest contributor to the recent increases in the scale, intensity, and tempo of military destructive potential.

Information technology, however, has not been as successful in improving our control over warfare. While we can quickly collect, process, disseminate, and display enormous volumes of information in support of military operations, this technology has proved to be a double-edged sword militarily.

The information processing facilities and technology are themselves highly vulnerable to a number of different threats from nuclear blast, to electro-magnetic pulse and similar phenomena, to sabotage. These facilities are, in addition, vulnerable to such problems as design deficiency, equipment malfunction, and operator error, as was shown in the false nuclear alerts of 1980 and 1981.

Most importantly from a purely military standpoint, these information systems look to be highly vulnerable to countermeasures--spoofing, jamming, etc. In fact, one of the growth areas in future military technology is likely to be in what could be termed 'information countermeasures,' systems aimed at removing or degrading the electronic eyes and ears on which modern warfare has become so dependent.

Finally, there is a question in the minds of many military men and analysts as to whether much of this information technology, especially that associated with strategic decisionmaking, does not pose a danger out outrunning the capabilities of the humans who must use such means to direct operations in a crisis or a conflict. We face such problems as information overload, distorted or missing information, and deceptive information--any of which could seriously impair decisions on matters of national survival., decisions which must be made with unparalleled speed and correctness. Though there is increasing capability for automated or semi-automated decisionmaking and for the use of artificial intelligence in decisionmaking, there are obvious drawbacks in relying very heavily on automated response capability.

In the environment suggested by emerging military technologies, politico-military leaders are going to be very hard-pressed to impose the kinds of limits that were formerly inherent in military weapons and control systems, limits that will be necessary for sensible decisionmaking and escalation-avoidance.

The distinguishing characteristics of the future conflict environment thus appear to be, first, greater overall vulnerability and, second, a much higher degree of information uncertainty owing to both changes in weapons technology and to the problems associated with new information technologies.

A first-order aim of arms control is therefore to bound these developments in such a way that both military and political leaders are facing crisis or conflict situations that do not outstrip their capacity for control. To put it another way, arms limitation has an important role to play in reasserting effective political and military control over the technologies that are rapidly entering arsenals but are loosening our control over the fateful decisions connected with crisis and conflict.

This summary has not addressed other and equally important contributions which arms control can make to our military capability, such as limiting the proliferation of nuclear or highly sophisticated conventional weapons. Such proliferation can only increase the threats our planners must face, strain the budget resources we have for maintaining our security, and tax the ability of our armed forces to perform their missions.

If some way could be found, other than negotiated security agreements, to keep current and anticipated threats to manageable levels, to reduce the growth of military and civilian target vulnerability, and to restrain the uncertainties facing us now and in the future, then that means should be compared to arms control to see which is the more effective method. But there does not seem to be any other viable answer to the security dilemma.

The need, therefore, is for greater and more genuine attention to arms control as a central element in our security policy. It is not a panacea, it is not the royal road to peace, and it is not bonanza of budget cuts. Nor is it without risks of its own. Yet one can scarcely see how a security policy without an important reliance on arms control can serve our national security interests. An intensified and widening technology duel with the Soviet Union has, over the past several decades, only reduced the reality and perception of security. In dealing with the consequences and the future of this competition, arms control will not only be helpful to our military interests, it will be essential to them.

But the timid, go-slow, rhetorical attitude we have taken toward arms control has made it increasingly difficult to achieve effective negotiated security agreements. The easy gains arms control might have made fifteen years ago are no longer open to the U.S. And changes in weapons technology are steadily eroding the ability of surveillance technology to provide the high confidence knowledge of Soviet forces and treaty compliance we have been accustomed to in the past. Thus, arms control can play an extremely important role in our specific military and general security policy, but only if we get on with the job and do not continue dragging our feet or pretending that arms control is merely an optional extra.

### SLOW PROGRESS IN ARMS CONTROL

Senator **Stevens**. Thank you very much.

Mr. Proxmire.

Senator **Proxmire**. You say we have been dragging our feet in arms control.

Do you think the demands we have made on the U.S.S.R. in START are reasonable?

Mr. **Kincade**. I think it is a rather unequal negotiating proposal in many ways, Senator Proxmire, partly because it gives us our desiserata first and concedes them theirs in the second phase. I do find that surprising in a negotiating proposal arm. Both sides typically in any kind of negotiation, whether labor negotiation or arms control negotiation, go in with the maximum proposal favorable to them.

What disturbs me is that we have not shown any willingness until recently to come off from that going in proposal to do what negotiating sincerely is essentially about and that is to find areas of mutual agreement to resolve differences and to get some kind of agreement that satisfies the interest of both parties.

Senator **Proxmire**. Now, you quoted Gen. Richard Ellis' alternative to arms control. He said if we don't have arms control, we either have appeasements, economic exhaustion resulting from an arms race or nuclear holocaust.

You note there is no justification for believing the Soviet Union can be coerced by the U.S. nuclear buildup. All that points to reductions as the logical path and most observers seem to agree with that, but is that always the case? Could we end up with smaller forces on each side, more lethal forces, more hair-trigger forces, more provocative forces?

Mr. **Kincade**. That is the case. That is one of the effects of arms control that is often overlooked in the strong public desire to achieve it. In general, the onset of war has much more to do with questions of misperception, miscalculation than it has to do with the numbers or performance of opposing forces.

So that in the process of achieving some kind of effective arms limitation regime, one has to be mindful of more than just the size or the performance capability of the forces and I think to a degree it is regrettable that debate in this country over the last several years has centered so exclusively on the questions of what are the numbers and what are the performance capabilities on both sides?

### MIDGETMAN CONCEPT

Senator **Proxmire**. Congressman Albert Gore has been the father of the Midgetman concept. He has pushed it hard. He has been joined by former Secretary of State Kissinger and by many others lately and it has been incorporated in the Scowcroft Commission report.

What arms contorl problems do you see associated with the Midgetman context?

Mr. **Kincade**. I think as earlier witnesses have suggested, it will have the effect when they reach the mobile phase of that missile of degrading to some degree not a verification capability, but the confidence that we can repose in those estimates of the opposing forces and the confidence we can repose in their having only the number of missiles provided for in an arms control regime.

I might further observe that the Midgetman is a very good idea. We should have stuck to it 20 years ago when we had a very good Midgetman missile in the pre-MIRV Minuteman.

### CRUISE MISSILE

Senator **Proxmire**. Where now should the arms control community be concentrating its energy in terms of arms control problems in the future, remembering what Kissinger said about his regret about not thinking through the MIRV decision?

Mr. **Kincade**. I think in the very first instance, Senator, we ought to be paying much more attention to the cruise missile for a number of reasons. It will be extremely difficult, if not impossible, to verify.

Second, it is going to cause——

Senator **Proxmire**. Do you disagree with Mr. Colby on that? He said even if they produced them underground, and so forth, we could verify it. Do you disagree with that?

Mr. **Kincade**. I think we can verify them within margins of the tolerance he suggested, but I think still we are in an area when we don't want to decrease the degree of confidence by any amount, even a small amount, if we can possibly avoid it and the cruise missile gives us the opportunity to avoid that kind of degradation in that level of confidence.

Mr. Adelman suggested that the cruise missile is going to pose a serious problem for not just arms control, leave that aside, but for strategic surveillance in the future.

I think the more important problem is when the Soviets begin to get modern cruise missiles, not the old kind of cruise missile left over from the 1950's, which they now deploy, but the kind of modern cruise missiles we are deploying in our B-52's, then we are going to be facing an unequal situation in which we will be far more prejudiced, owing to our very long coastline and on their side the very restricted access to the Soviet coastline.

In the past that long coastline as been a strategic advantage of ours and their relatively restricted access to the sea has been a disadvantage to them in terms of intercontinental forces.

With the provision in the arsenals of both super powers of large numbers of undersea, sea-launched, air-launched cruise missiles, I think that the situation will be reversed, we will be penalized for our long coastline and access to the relatively small access.

### ON-SITE INSPECTION

Senator **Proxmire**. How could we go about deMIRV'ing our ballistic missiles to a degree that will allow confidence on both sides without onsite inspection?

Does it mean we both will have to develop single warhead systems?

Mr. **Kincade**. I think in the first instance I would deal with the onsite inspection problem. As a former intelligence officer, I would say I would love to have the job in the Soviet military bureaucracy of designing ways to confuse onsite inspectors.

I pose much greater alliance in the technical means of verification, whether you had people, as Senator Stevens said, who are nonintelligence experts doing it or intelligence experts, it is a very easy kind of proposition.

I think the question of onsite inspection need not come up in the context of moving to a single warhead missile.

Senator **Proxmire**. For the record, will you give us a little memorandum on how that deception would work without onsite inspection because there is interesting testimony by Mr. Colby who has prestige in this area. Any documentation you have rebutting that is very interesting. You raise an interesting point in discussing what is in effect arms control with any nation.

You argue exposure of information to a decisionmaker, reliance on new technology for processing facts give rise to the possibility of accidents or faulty command and control decisions.

What can we do here at home to make sure that policymakers are not trapped into crisis decisions based on faulty intelligence and communications systems?

Mr. **Kincade**. I think that there are a number of steps that are being taken or planned in that area. Improving and providing greater redundancy for your command and control system is one of them.

I think my concern is for the quality and the timeliness and abundance of that information.

I think probably we need to do something along the lines that have been suggested here in the Senate, of building insurance against such mistakes arising out of misinformation and miscalculation. Something like the more advanced hotline system which has been proposed here for a joint crisis management system, it seems to me provides some protection against the miscalculation that is at least of equal concern to me as the number of weapons around the world increases.

Senator **Proxmire**. Thank you for an excellent statement. You are very, very helpful.

### NUCLEAR PROLIFERATION

Senator **Stevens**. Just one last question.

I presume that your association is interested in nuclear proliferation as well as the problems of United States-Soviet nuclear competition?

Mr. **Kincade**. Indeed so.

Senator **Stevens**. Do you think that is as large a problem for the world as the problem of our apparent arms race at the time?

Mr. **Kincade**. Senator Stevens, I have my own position. I would like to underscore again I am speaking in my own capacity and not as representative of the association because arms control is not a monolith. It is not a unitary actor.

I perhaps view the probability of extensive nuclear proliferation as a lesser problem than many of my colleagues in the field.

I think the prospect is that the near nuclear nations, the threshold nuclear nations, are going to arrive at an ambiguous position, perhaps somewhat similar to the ones Israel has achieved where it is not clear that they have or do not have nuclear weapons, it is not clear how soon they may possess nuclear weapons and then they are going to bargain with that position with super powers or other suppliers of weapons.

They say if you want us to stay on the right side of the nuclear threshold you will have to provide us with endless amounts of very sophisticated conventional weaponry. They will use the leverage that one gains from being in an ambiguous state vis-a-vis a nuclear weapons capability.

I would point, for example, to India and Pakistan and what they have done to milk the super powers by being a very near nuclear state.

Nevertheless, there is a relationship between the possibility of proliferation to other nations in the world and what is called the additional increment of nuclear weapons supplied by the super powers to themselves.

That connection is not always a simple one. If we don't somehow halt the vertical proliferation of nuclear weapons, the rest of the nations of the world will follow us into the nuclear club. I think that would be a bit naive.

I do think we give them an excuse or give them an example that is very much to our long-term disadvantage. If we start facing significant numbers of nuclear nations 10, 15, 20 years from now, I think we would wish we had put a great deal more effort on preventing that prospect today.

Senator **Stevens**. Thank you very much.

I want to thank you, Senator Proxmire, for suggesting these hearings.

Senator **Proxmire**. I want to thank you, Mr. Chairman, for conducting them. I think they have been extremely useful. I am delighted with the excellence of the witnesses. I think we are fortunate to have the people we have had, especially Mr. Kincade who is the anchorman.

Mr. **Kincade**. Thank you.

Senator **Stevens**. Thank you very much, Mr. Kincade.

There will be questions submitted to some witnesses for the record. When those responses are received, the record will be closed.

Thank you very much.

Mr. **Kincade**. Thank you.

### SUBCOMMITTEE RECESS

Senator **Stevens**. The subcommittee will be recessed at this time, subject to the call of the Chair.

[Whereupon, at 5:10 p.m., Tuesday, May 10, subcommittee was recessed to reconvene at the call of the Chair.]

# DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1984

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WEDNESDAY, SEPTEMBER 14, 1983

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, D.C.*

The subcommittee met at 10:15 a.m. in room SD-192, Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Andrews, and Rudman.

## DEPARTMENT OF DEFENSE

### DEPUTY UNDER SECRETARY OF DEFENSE FOR RESEARCH AND ENGINEERING (ACQUISITION MANAGEMENT)

### STATEMENT OF MARY ANN GILLEECE, DEPUTY UNDER SECRETARY OF DEFENSE (ACQUISITION MANAGEMENT), OFFICE OF THE UNDER SECRETARY OF DEFENSE FOR RESEARCH AND ENGINEERING

**ACCOMPANIED BY:**

- **SEYMOUR J. LORBER, DIRECTOR OF PRODUCT ASSURANCE AND TESTING, U.S. ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND, DEPARTMENT OF THE ARMY**
- **REAR ADM. J. S. SANSONE, U.S. NAVY DEPUTY CHIEF, NAVAL MATERIEL FOR CONTRACTS AND BUSINESS MANAGEMENT, DEPARTMENT OF THE NAVY**
- **BRIG. GEN. BERNARD L. WEISS, U.S. AIR FORCE, DIRECTOR OF CONTRACTING AND MANUFACTURING POLICY, DEPUTY CHIEF OF STAFF, RESEARCH, DEVELOPMENT AND ACQUISITION, DEPARTMENT OF THE AIR FORCE**
- **MAJ. GEN. JOSEPH H. CONNOLLY, U.S. AIR FORCE, DEPUTY DIRECTOR FOR ACQUISITION MANAGEMENT, DEFENSE LOGISTICS AGENCY**

## WARRANTIES ON MILITARY EQUIPMENT

### OPENING STATEMENT OF SENATOR STEVENS

Senator STEVENS. Good morning.

This is the time scheduled to take testimony from departmental witnesses on the question of expanded use of warranties in the Defense acquisition process.

Increasing attention has been focused on military procurement in recent months. In earlier hearings we have looked into the problems of spare parts overpricing, lack of competition, and the management of procurement by the Department and the military services.

Some of the problems and abuses that have been uncovered, not only by Congress but by the Department's own auditors, are inexcusable. Public indignation over these excesses is, in my judgment, one of the biggest current threats to the defense consensus that has enabled us to increase support for modernizing and improving the readiness of our Armed Forces.

Largely at the initiative of Senator Andrews of this subcommittee, Congress last year adapted a provision in the fiscal year 1983 Defense Appropriation Act requiring warranties in any new jet engine procurement.

Currently, that warranty requirement is a main feature of the proposed alternate fighter engine competition of the Air Force. There is every reason to expect this warranty requirement will produce a more reliable engine and hopefully at a lower cost.

## HEARING PROCEDURE

The purpose of our hearing today is to consider expanded warranty requirements and how they might most effectively be applied to the defense acquisition process. Senator Andrews again is taking the initiative in this area for which I congratulate him and has developed proposed language for the fiscal year 1984 defense appropriation bill.

Statements from the Department to date, however, indicate a reluctance to break new ground in the area of warranties. Perhaps we can explore the reasons for this reluctance at today's hearing.

The principal witness today is Mary Ann Gilleece, Deputy Under Secretary of Defense with responsibility for acquisition management. I will ask Ms. Gilleece to submit her prepared statement for the record, where it will be printed in full, and to summarize her remarks for the committee before we get into questions.

First, however, I would like to defer to Senator Andrews and to Senator Rudman for any remarks they might have.

I have to apologize, Ms. Gilleece, and gentlemen at the table, I must also go chair another subcommittee hearing. I am going to turn this hearing over to Senator Andrews.

We have added to our witness list, I am informed, non-Government witnesses, Mr. Jerry Smith, assistant vice president of material services, USAir; Mr. J. A. O'Hara, corporate director of contract administration, the Boeing Co.; and Dina Rasor, project director, Project on Military Procurement.

I am sure the committee looks forward to hearing those witnesses, too.

Senator Andrews, will you chair the hearing for us?

Again, I apologize.

## OPENING STATEMENT OF SENATOR ANDREWS

Senator ANDREWS [presiding]. Thank you, Mr. Chairman, and thank all of you who have come to attend the hearings to investigate the parameters on requiring warranties on military equipment.

The purpose today is to confront what can be called a serious internal threat to U.S. national security, the inability to assure U.S.-made weapons will work in the hands of our troops on the front lines or in our Nation's defense and the need to restore confidence to the American taxpayer that their dollars spent for defense are not being wasted.

The F-18 fighter aircraft, Tomahawk, and M1 tank are a few examples covered in GAO reports, the press as well, revealing weapon systems either untested or with manufacturing deficiencies.

## QUALITY OF WORKMANSHIP ON WEAPONS SYSTEMS

As you can see, weapons with shoddy workmanship exist within all of the armed services. The neglect in assuring military equipment performance simply has to stop. Putting responsibility squarely on American manufacturers is the best way to stop reports of slipshod quality in U.S. weaponry and build military equipment standards up to trigger readiness.

Let me assure every one I am for a strong defense. However, I want those weapons necessary for a strong defense to work as intended. I think the American public should demand no less. I think if we are going to maintain our freedom we have to have weapon systems that do in fact work and we have to expend dollars on a defense budget that are wisely invested.

The warranty system isn't new. It has evolved over a number of years, in fact three of our decades on the civilian side. The housewife can buy a toaster that is warrantied for 3 years. If I as a farmer can buy a tractor with an Allison transmission which has one-fourth the horsepower of an M1 tank and that Allison transmission is guaranteed for 3 years to work in dust, snow, dirt, cold, and all the rest, then why can't we get an Allison transmission in an M1 tank guaranteed?

Today there are warranties for aircraft, communication satellites, state of the art manufactured goods, *Columbia* and *Challenger* orbiters for the space shuttle program. In the military sector manufacturers in Western Europe warranty such high technology weapons as short- and long-range air defense systems for their country's defense and for NATO forces.

The Defense Department should not turn over the design of reliability and supportability to the contractor and then try to uncover the defects. Equipment should be designed right in the first place for its mission and task and for threat and thus a strict warranty should be installed and in force.

As I pointed out, when I buy a tractor it costs six figures. My banker insists that I get a warranty on it because of its cost. Those of us on the Appropriations Committee are in effect the bankers for those of you who run our defense establishment. I think it is incumbent on us to make sure not just to pass those dollars through, but to make sure they are wisely invested.

Just as I know my tractor has to function in those critical days when I am putting the crop in, so, too, do those weapons systems have to function in a critical time when you might meet an enemy.

It goes without saying unanimous consent can be reached in this room now on the need for Congress to demand that the weapons will work when needed.

The question is how to do it. This hearing takes us a step beyond the barrage of horror stories about cost overruns and shoddy performance. There has been enough headline hunting on both sides. People did not send us down here to make noise, but to find solutions.

I think the time has come to make changes in how we purchase military equipment.

### PREPARED STATEMENT OF SENATOR ANDREWS

I have an opening statement.

[The statement follows:]

## Prepared Statement of Hon. Mark Andrews

### U.S. SENATOR FROM NORTH DAKOTA

Because I realize there is opposition to my amendment requiring written warranties on military equipment, I am furnishing the following details.

As I mentioned in my July 20 press conference, I intend to include an amendment in the FY 1984 appropriations bill requiring written warranties on future buys of military equipment. I asked the Department of Defense for an opinion on the application of warranties to the purchase of military weapons. Their response said that warranties would "increase the cost of our programs to an unacceptable level..."

I disagree with this reply. I do not believe there is any data to substantiate this point. In fact, responses from the armed services and the Secretary of Defense to my request for military equipment under warranty explain why I disagree with DOD's claim that warranties mean higher weapons costs. The response to my request explained that the information was not readily available, primarily due to DOD's lack of a central depository where the requested information could be readily collected and transmitted to Congress. Therefore, I must ask, where is the evidence showing higher weapons costs due to warranty provisions?

Let us, nevertheless, look closely at some examples of warrantied military equipment to see whether their costs have sky-rocketed. The first example is the recent competition going on right now for the new fighter aircraft engine. General Electric and Pratt & Whitney have both submitted their proposals for the prime contract as well as warranties for the engine's 3,000 tactical cycles. Have the costs of these engines gone through the sky? No, and as a matter of fact, the Air Force contends that initial costs of its proposal for 2,500 engines will be offset by 20-year "life cycle" savings of close to $2 billion. These savings, according to the Air Force, are due to warranties on the durability of key engine parts. These warranties and this competition are in large part due to my amendment last year in the defense appropriations bill requiring any new or alternative fighter aircraft engine bought by the Air Force or Navy have a written warranty.

Another example of warrantied military equipment is the ARN 123 VHF omni-directional receiver (VOR ILF), built by Bendix Corporation and used in U.S. Army Cobra, H-58, and UH60 Black Hawk helicopters. The ARN 123 is an instrument landing receiving gear. The receiver was bought in 1975 with a five-year reliability improvement warranty (RIW) where Bendix Corporation agreed to repair defective receivers and supply new ARN 123's while defects were being repaired.

The ARN 123 does have a commercial counterpart, but the system was modified to meet military specifications for the Army's helicopters. It was therefore considered a "new" system, close to state-of-the-art.

To date, 2,000 ARN 123's have been sold with additional systems on order. The unit cost of these systems is $7,700, which is a very competitive price with other comparable navigational devices.

I have been informed that no quality control problems have been reported and that the warranty has enhanced the reliability and performance of the ARN 123 in support of the Cobra, H-58 and Black Hawk helicopters.

Still another example is a reliability improvement warranty for the T700 engine used in the Black Hawk and Advanced Attack helicopters. With the exception of miscalculations on the contractor's liability ceiling, the warranty stimulated early solution of start-up production problems and accelerated the achievement of a mature engine. Overall, the warranties encouraged the production of problem-free engines. The cost was not exorbitant and, in fact, as revealed in the House Subcommittee on Appropriations hearings on DOD's FY 1984 budget, the warranty should have extended further than originally agreed upon.

Lastly, there is the Lightweight Doppler Navigational System that came with a four-year warranty and was competitively priced. Figures show that during the warranty period, the contractor repaired and replaced 601 line replaceable units (Black Boxes) and guaranteed a demonstrated field reliability of 943 hours between failures, which is approximately 100% improvement in reliability performance.

An interesting addition to the list not related to cost, but reliability, involves the ASN 92 navigational system produced by Litton Systems. The navigational system was warrantied under a "crowned contract" where the manufacturer took complete responsibility for anything that happened to the system. After talking to a commander at Navy Air System Command Headquarters, he attributed the warranty to the increased readiness in F-14 aircraft.

There is an ironic twist to DOD's argument of unacceptable weapons costs increases due to warranties. It should be noted that DOD has extensively looked into warranties and shows some experience with warranties. As evidence of this, I draw your attention to the Defense Acquisition Regulations, Section 1-324, that gives the provisions for warranties in government contracts. In addition to warranty provisions in Section 1-324 are examples of warranty clauses in the DAR in Sections 7-105.7(a), 7-105.7(b), 7-105.7(c), 7-1904.5(b), and 7-604.4. The fundamental problem with the warranty provisions listed in the DAR is that they are not enforced, or even utilized, in a large number of military equipment purchases.

I also obtained a technical report from the Defense Logistics Agency entitled "Warranties on Commercial Items Within DOD." This report summarized contracting practices and warranty usage on vehicles, appliances, textiles and clothing. Surely, if the cost of these items significantly increased with warranties, DOD would have abandoned the practice long ago, or so we would assume. However, DOD has had success in warranting commercial items and it is my belief that similar, if not more, success can be attained with warranties on military equipment.

An argument raised by skeptics opposed to the warranty idea is that the complex integration of defense equipment components and their respective contractors and subcontractors will turn warranties into a legal quagmire, cancelling out the warranty's enforcement.

This problem can be avoided by having the prime contractor for the military equipment warranty the complete product. Having the prime contractor warranty the complete weapon puts the responsibility on that prime contractor for securing warranties from other contractors and subcontractors. This holds two important advantages:

(a) The prime contractor may already have prior warranty contractual experience with contractors and subcontractors (for commercial or military products), enabling contract negotiations to proceed relatively quickly and (possibly) be less costly.

(b) With the prime contractor in charge of securing warranties, principal responsibility remains with him to make sure the subcontractors remain tooled to provide the maintenance and spares for the military equipment. Many of the present cost overruns are a result of these one-time contracts for weapons which, when in need of repair, are sent to the manufacturer who has already retooled his factory for another product. He must then charge enormous amounts to retool again for the initial weapon. With warranties on the weapons, the prime contractor bears the cost of any retooling for repairs or production of spares and has the incentive to prevent this from occurring.

Skeptics also argue that warranties will lead to burdensome legal battles in the courts due to finger-pointing over who is to blame for shoddy workmanship on military equipment. This problem, however, can be avoided by a four-step process that lists the government's major obligations under a warranty procurement. This process is as follows:

(1) Testing all suspected failures on applicable test sets prior to return (of the defective product) to the contractor.

(2) Utilizing approved shipping containers.

(3) Furnishing failure circumstance data.

(4) Minimizing build-up of defective military equipment at the depots.

Officials at the Pentagon tell me there is no need for warranties due to the extensive tests the manufacturer and armed services perform on military equipment.

Even if this were true, it is not enforced, and there is plenty of evidence showing weapons going into production after poor performance tests or no tests at all.

Some cases in point:

(a) Tomahawk antiship and land attack missiles - The missiles were never fully tested. The Navy has asked for an additional $11.7 million to increase special testing associated with the vertical launch system (the missiles are currently deployed onboard the New Jersey battleship).

(b) GAO report released on June 23, 1983 indicated the Pentagon ordered $33 billion worth of weapons without accurate tests or ignoring unfavorable test results. GAO's conclusions showed "important and costly weapons, such as the Navy's CG-47 AEgis cruiser, the improved Phoenix air-to-air missile, the Army's Patriot missile, and the Air Force's B-52 offensive avionics system, will be deployed without assurance that they will meet performance expectations."

Other examples:

- CG-47 AEgis cruiser: The Navy, with Congressional approval, decided to buy eight cruisers at $1 billion each before any sea trials and "before it was shown that the ship was capable of meeting Navy mission requirements." (GAO)

- Patriot Air Defense Missile System and Phoenix Air-to-Air Missile: Both will be built without complete testing because existing aerial targets cannot adequately test the system's capabilities.

- B-52 Offensive Avionics System and the Use of Test and Evaluation Master Plans (TEMPS): The importance of early test planning was emphasized by the Under Secretary, Defense Research and Engineering, in an August 9, 1983 memorandum to the services. He said that proper planning is essential to improving the acquisition process and that priority attention must be given to incorporating test requirements into established planning documents such as TEMP. He further stated he intends to use TEMPs to "clearly identify test resource requirements."

Properly used, the TEMP can serve as the basic test document to define future testing and test resource needs. However, TEMPs have not often been used to their potential. OSD used TEMPs for the B-52 avionics, but TEMPs never specified the types of test resources needed, whether resources were available, or the effect of not having adequate resources. The B-52 could not be adequately tested against recognized threats because threat simulators were not available in sufficient quantity.

A second point to make regarding DOD's argument that weapons are adequately tested before their production concerns the "Government's Right to Inspect" listed in the Defense Acquisition Regulations (DARs). Listed in the DAR Section 14 is a section on "Procurement Quality Assurance" (see the following xerox copy for the general policy guidance on inspection).

The inspection provisions and quality control procedures are there in the DAR and Federal Procurement Regulations (FPRs), but they are not enforced. The GAO report listing those weapons not adequately tested with quality control problems is evidence of this neglect. Aside from suggesting a change in the DAR requiring inspection, a warranty with penalties will assuredly require the manufacturers and DOD to test the defense equipment before delivery.

Other arguments against warranties on military equipment point to the inability of contractors to warranty weapons built by high-technology because of the technology's uncertainty.

Research on warranties for advanced technological equipment contradicts this argument. For instance, components on the Columbia and Challenger orbiters for the Space Shuttle Program are warrantied. In addition to the Columbia and Challenger, communication satellites purchased by private enterprise are heavily warrantied. Through a program of warranties which stimulates extensive quality control on the part of the manufacturer, these satellites have experienced a 99.9 percent reliability in performance.

Since my press conference several weeks ago, I have heard from manufacturers of military equipment for NATO forces who warranty their products and other manufacturers who believe that reliability of performance can be achieved through proper design and mandatory testing and who are prepared to back their products with warranties.

If there are warranties on components to assure their reliability and consequently the safety of U.S. astronauts, satellites, and NATO forces, isn't it time to warranty weapons that will protect U.S. armed forces and our nation itself in times of crisis or war?

Lastly, I have heard arguments that warranties will not be effective when defense equipment breaks down overseas. U.S. defense equipment will break down in foreign countries. However, the effectiveness of warranties will not be weakened due to manufacturers located in the U.S. For defense equipment produced for service abroad, an "In-House Service Warranty" should be negotiated. In-house service warranties permit the buyer to choose the shop to perform a particular warranty repair. With defense equipment overseas, the majority of warranties should require maintenance on defective parts at the overseas military depot at the manufacturer's expense. The arrangements of the warranty are agreed to after the manufacturer is satisfied that the maintenance facilities have the necessary space and equipment and the mechanics can do the work. In addition, the agreement may stipulate that the company will keep failed parts for some number of days in case the manufacturer wants to inspect them.

An important example is GE's recently submitted warranty on their F110 engine. They have submitted a 3-year warranty on their engine that provides for depot-level maintenance should breakdowns occur. GE has inspected the depots and will place their own technicians at the depots to assure the servicing of their engines is performed efficiently.

The Pentagon also argues the warranties will only work in a fixed price contract with which few weapons are negotiated. Cost reimbursement and fixed price incentive contracts (negotiated based on the performance and care of the defense equipment after delivery and total cost is not determined until such a time) puts the government at a disadvantage because the warranty may needlessly make the weapon more expensive based on speculated total cost.

It is true that few weapons systems are negotiated with fixed price contracts. However, even with uncertain total weapons costs that have cost reimbursement and fixed price incentive contracts, it does not dissuade negotiations for a "fixed price warranty."

A fixed price warranty is a warranty whereby the manufacturer agrees to repair or replace defects in design and workmanship at a set cost. A fixed price warranty can be separately negotiated and the manufacturer can be required to perform cost schemes on the weapons to ascertain how much warranties will figure in the total cost. A fixed price warranty negotiated with weapons under a cost reimbursement or fixed price incentive contract holds many advantages.

The warranty cost schemes from the manufacturer provide some early indication of what the weapon may cost when compared to the estimated total costs. Also, the more favorable a fixed price warranty is on a weapon for DOD under these contracts, the harder the manufacturer will work to prevent cost overruns. This will occur because initial costs for weapons are relatively low, and if the manufacturer is confident in his weapon, he should be able to negotiate a fixed price contract that includes a large financial risk. Where cost overruns happen as a result of defects in design and workmanship, the manufacturer must pay the cost. Delays in production and delivery should especially be warrantied under these contracts and strike down a factor that produces overruns. It must not be forgotten that in a competitive environment, manufacturers will be putting forward their best fixed price warranties and total cost estimates for weapons. Whether in competition or in "sole-sourcing", the manufacturer should be held to initial cost estimates and warranties can be used to enforce them.

## INTRODUCTION OF WITNESS

Senator **Andrews**. I would like to yield to my colleague, Senator Rudman.

Senator **Rudman**. I don't have an opening statement, Mr. Chairman. I will listen to the testimony this morning. Unfortunately, I will have to leave early. I am interested particularly in hearing the departmental witnesses.

Senator **Andrews**. Madam Secretary, you may proceed as Senator Stevens, our Chairman, pointed out. Your entire statement will appear in the record as though given in full. If you wish to summarize it, we can give the time for questions to Senator Rudman who has a critical schedule.

## INTRODUCTION OF ASSOCIATES

Ms. **Gilleece**. Thank you very much, Mr. Chairman.

We certainly appreciate the opportunity to come over today to talk to you about the warranty area.

I am accompanied today by Mr. Seymour Lorber, Director of Product Assurance and Testing, U.S. Army Materiel Development and Readiness Command; Rear Adm. J. S. Sansone, U.S. Navy Deputy Chief of Navy Materiel for Contracts and Business Management; Brig. Gen. Bernard Weiss, U.S. Air Force, Director of Contracting and Manufacturing Policy, and Maj. Gen. Joseph Connolly, U.S. Air Force, Deputy Director for Acquisition Management, Defense Logistics Agency.

## INAPPROPRIATE USE OF WARRANTIES

Mr. Chairman, the Department of Defense is fully supportive of the use of warranties when appropriate. Warranties foster quality performance and warranties delineate the rights and obligations of the Government and the contractors.

I mentioned the Department is supportive of warranties when appropriate. I would like to explain some of the situations where we believe that the warranties are appropriate.

First of all, when the technology is mature so that the risk can be reasonably identified a warranty would be appropriate. Items in the early stages of production and with very little operating experience may lead to risk.

This risk may be so great that if a contractor must give warranties to the Government, the price to cover his cost if he has trouble meeting the provisions of the warranty may be exorbitant. He will price that risk.

Risk does not go away by establishing a warranty. It may mean that the Government's share of the risk may then shift to the contractor, but the price to the Government of the item will increase with that shift.

Second, the warranty must be consistent with the acquisition objectives of the item and the mission the item is intended to accomplish. If the item must retain a level of intensity of 72 hours, a warranty that only requires the level of intensity to be 48 hours would clearly be inconsistent.

I might comment that fighter engine durability is a major objective of the fighter engine competition.

A third condition that should exist is that the Government must be able to administer the warranty reasonably. That is, the ability to collect the data on the items that are wanted to determine if the item is still within the warranty before we can in fact enforce the warranty.

The ability to collect the data should not be more costly than the likely benefit of the warranty. Once again regarding the fighter engine, the Air Force is already collecting data on the engine. No new administrative apparatus is needed to collect the data.

### APPROPRIATE USE OF WARRANTIES

Warranties are appropriate on fixed price type contracts. In a cost reimbursement mode the Government in fact will pay for the correction to fix the item in accord with that warranty.

Warranties are appropriate in a competitive environment. That is the time when the Government would obtain a warranty for the lowest price.

### COMMERCIAL MILITARY WARRANTIES

I would like to focus a few comments, if I might, on the difference between a commercial warranty and a warranty on military equipment.

The Department of Defense does obtain commercial warranties on most of its commercial equipment. The only reason we would not is if we do not know we will be using the warranty in the mode appropriate with the warranty.

In other words, if we know that we will be using the item in such a way as to invalidate the warranty or if on balance the price is cheaper without the warranty, then we would not choose to accept the commercial warranty. But that occurs in only a very few instances.

In a commercial environment the contractor has the unilateral right to change the item. The individual buyer has no input to the design in a commercial environment. Most of the time there are also multiple buyers.

In a Department of Defense purchase, however, the Department is usually the old buyer of the military equipment. Military designs and specifications are provided by the Government. The Government has the unilateral right to change it. Changes in threat or safety of flight are two examples that will change the requirement.

There is also a major difference in configuration control. Who has that configuration control? In the commercial environment the offeror of the warranty, or the manufacturer of the equipment, has the configuration control. However, when the military purchases, the offeree or the Department of Defense has the configuration control.

Another difference is that weapon systems are usually state of the art technology. Commercial warranties are almost always applied to low technology items. When we have low technology items or when buying commercial items we usually obtain a warranty.

Military items also must be able to perform in extremes of temperature, vibration, and other operational conditions seldom experienced by commercial products. Commercial warranties normally require the return of the item to the manfacturer for repair and all service on the item is to be performed in accordance with the warranty provision.

If they do not act in accordance with the manufacturer's warranty provision, the warranty is invalidated. If similar conditions, however, were imposed on weapon systems, it would be difficult, if not impossible, to comply with the conditions of the warranty because our military hardware is deployed throughout the world.

### REPAIR OF WARRANTIED ITEMS

If the repair facilities, be they the contractor's repair facilities or military repair facilities, were available, then we could repair the component in accord with the warranty. But many times an item breaks down and such repair facilities are not available.

Therefore, we find it easier to apply warranties to subsystems rather than complete weapon systems. Thus we can send a black box back to the manufacturer rather than the ship or the aircraft. Also, we must develop an organic repair capability so that we can repair the item during wartime.

By way of definition, an organic repair capability would mean that the service repairs the item as opposed to the manufacturer. Organic repair rather than sending back to the manufacturer usually invalidates a warranty.

Additional problems exist when requiring a warranty on all systems. Warranties cost money and the result would be a significant increase in the defense budget In our acquisition system when we buy military items the warranty is priced separately and thus audited separately.

There is also difficulty in many cases in enforcing the warranty for it is physically impossible to return to the contractor or to put in the service facility for repair the item that is warrantied.

Problems in additional administration of the warranties revolve around the fact that the warranty period may expire while an item is in storage. The user sometimes is not even aware that the item is covered by a warranty.

Blanket warranties would put too much risk on contractors. It would be passed down from the prime, to the sub, to the vendor and if enforced would drive people out of the defense industrial base. This would especially hurt the small businesses.

Small businesses woud bear the brunt of enforcing a weapon system warranty. At best a warranty on all weapon systems would lead to a string of disputes.

Disagreement between contractor and Government concerning the responsibility for an item breaking would lead to many disputes, the contractor stating that the Government's misuse of the item caused the problem while, of course, the Government would view it in the alternative.

## SPARE PARTS

Mr. Chairman, I might add that another problem deals with the spare parts arena. Recently in testifying before the committee we explained that the Department of Defense is certainly going to focus more attention on competition within the spare parts arena.

If the committee chooses to impose a warranty on all major systems, that would mean that we could not break out spare parts for competition, but it would require us to continue to buy all of the spare parts from the contractor so that we could have the warranty in an enforceable method.

These reasons lead to our present policy.

By the way, I have attached to my statement the defense acquisition regulation coverage currently in effect. We make use of warranties, but we make use of them in a discretionary mode. We use them when appropriate.

By way of statistics, approximately one-third of our 4.1 billion inventory items are covered by warranties.

The Commission on Government Procurement endorsed, by the way, the position that the Department of Defense should basically be a self-insurer in order to limit contractor risk and keep procurement costs down.

Warranties are an important tool, but they do cost money. We need the flexibility to use and not use them when it makes sense. The Department recognizes that warranties penalize poor performance and are intended to limit the buyer's common-law remedy.

Thus the buyer can only obtain damages as allowed by the warranty. However, the Department also supports incentives that are available that not only penalize poor performance, but also reward excellent performance.

## CONTRACTOR PERFORMANCE INCENTIVES

I would like to define for you some of those contractor performance incentives.

First of all, the acquisition improvement program established by this administration defined within the Carlucci initiatives, certain of those initiatives which were to improve the support and readiness of our systems and thus the performance reliability, maintainability, durability.

The acquisition improvement program does continue under Deputy Secretary Thayer and he has chosen as one of his major initiatives the reliability and support goals which he has defined.

What he has suggested is placing in the front end of the program the establishment of reliability and support goals.

The source selection criteria is being revised to emphasize, by the way, the reliability and maintainability. We are trying to reward good performance by using award fees for good reliability and structure cost incentives for interim contractor support.

This is complemented by increased emphasis on designing in reliability in order to ease the transition from development to production.

## INDIVIDUAL SERVICES WORK IN WARRANTY AREA

I would like to also mention to you a few of the things that the services are currently doing in the warranty arena. The Air Force has published a "Product Performance Agreement Guide" that is a detailed informational guide focusing on methods for motivating improved assurances that the product we purchase will work as advertised.

The Air Force has also established the product performance agreement center at Wright-Patterson Air Force Base. The services at this center are offered to and used by all of the services.

The center is currently involved in developing a data base that will define the procedure to evaluate the cost effectiveness of performance agreements and warranties and supporting program offices in the structuring of warranties. Consideration will be given in the future to making this center a triservice center.

Mr. Chairman, in conclusion, the Department of Defense is most supportive of reliability, durability, and the performance objectives needed to make our military equipment the best and the safest for our troops. Use of a warranty is but a tool that can be used in the appropriate case to assure to a greater extent that we will obtain the necessary equipment in the most cost-effective manner.

Our contracting officers are highly trained and should continue to have the flexibility to use all tools available to them, including the use, in the appropriate case, of warranties.

Mr. Chairman, members of the committee, that concludes my synopsis of my opening statement. We will be pleased at this time to answer your questions.

[The prepared statement of Ms. Gilleece follows:]

## PREPARED STATEMENT OF MS. MARY ANN GILLEECE

DEPUTY UNDER SECRETARY OF DEFENSE
RESEARCH AND ENGINEERING
(ACQUISITION MANAGEMENT)

MR. CHAIRMAN, AND MEMBERS OF THE COMMITTEE. I APPRECIATE THE OPPORTUNITY TO DISCUSS THE GENERAL AREA OF WARRANTIES AND THEIR APPLICATION IN THE ACQUISITION OF MILITARY EQUIPMENT AS PRACTICED IN THE DEPARTMENT OF DEFENSE.

WE SHARE A BASIC OBJECTIVE WITH THE PUBLIC, THIS COMMITTEE, AND THE INDUSTRY TO ENSURE THAT WE FIELD THE BEST EQUIPMENT POSSIBLE TO MEET OUR NATIONAL SECURITY NEEDS. IN SO DOING WE TAKE A BALANCED RISK APPROACH TO ATTAIN THE RELIABILITY, MAINTAINABILITY, AND SYSTEM OR EQUIPMENT PERFORMANCE THAT IS ESSENTIAL TO MEET THIS REQUIREMENT. THE DEPARTMENT OF DEFENSE SEEKS TO EMPLOY GOOD BUSINESS PRACTICES IN STRUCTURING OUR ACQUISITION STRATEGIES TO SATISFY THESE COMBINED OBJECTIVES AT LEAST COST. WE ARE CONSTANTLY IMPROVING OUR METHODS THROUGH THE APPLICATION OF LESSONS LEARNED, EXCHANGES WITH INDUSTRY, COMMISSIONS AND OUR INTERFACE WITH THE CONGRESS AND THE PUBLIC.

WE HAVE LEARNED THROUGH SOME GOOD AND BAD EXPERIENCES THAT WE ATTAIN THE BEST RESULTS THROUGH SELECTIVELY TAILORING OUR ACQUISITION STRATEGIES ON A CASE-BY-CASE BASIS. WARRANTIES AND VARIOUS KINDS OF PERFORMANCE GUARANTEES ARE VALUABLE TECHNIQUES WE USE FREQUENTLY IN OUR ACQUISITION PROCESS, BUT THEY ARE NOT APPROPRIATE IN ALL CASES. LET ME TAKE A MOMENT TO REVIEW SOME RELEVANT BACKGROUND FOR YOU.

THE DEPARTMENT OF DEFENSE HAS HAD A LONG HISTORY IN THE USE OF WARRANTIES. THE SERVICES USED VARYING APPROACHES TO WARRANTIES AND CORRECTION OF DEFECTS, BUT IN 1964 THE DEPARTMENT ISSUED DETAILED INSTRUCTIONS FOR THE USE OF WARRANTIES IN FIRM-FIXED-PRICE CONTRACTS. THESE INSTRUCTIONS WERE IDENTIFIED IN THE ARMED SERVICES PROCUREMENT REGULATION (ASPR), NOW THE DEFENSE ACQUISITION REGULATION (DAR), IN SECTION 1-324. SINCE

THAT TIME WE HAVE GONE THROUGH SEVERAL EXPANSIONS AND CLARIFICATIONS AND ARE IN THE PROCESS OF ACHIEVING FURTHER IMPROVEMENTS WHEN THE FEDERAL ACQUISITION REGULATION (FAR) IS IMPLEMENTED IN THE SPRING OF 1984. IN 1967 WE EXPANDED OUR WARRANTY COVERAGE POLICY BY ADDING A "CORRECTION OF DEFICIENCY" CLAUSE AND A "WARRANTY OF CONSTRUCTION" CLAUSE. THE LATTER CLAUSE INTRODUCED "CONSEQUENTIAL DAMAGES" AS A LIABILITY TO THE CONTRACTOR FOR DAMAGE TO GOVERNMENT PROPERTY. CONSEQUENTIAL DAMAGES IS IMPORTANT BECAUSE IT OPENED A NEW ISSUE RELATIVE TO THE SHARING OF RISK BETWEEN GOVERNMENT AND CONTRACTOR. THE ISSUE AROSE WHEN THE AUSTRALIAN GOVERNMENT SUED LOCKHEED AIRCRAFT AND ITS SUBCONTRACTOR, MENASCO, BECAUSE OF AN ALLEGED LANDING GEAR FAILURE WHICH CAUSED THE LOSS OF THE AIRCRAFT AND OTHER DAMAGES. AN OUT-OF-COURT SETTLEMENT RESULTED IN MENASCO, LOCKHEED, AND THE U.S. GOVERNMENT CONTRIBUTING TO THE PRICE OF A REPLACEMENT AIRCRAFT.

THIS INCIDENT RESULTED IN A REVIEW OF THE DEPARTMENT'S POLICY ON WARRANTIES AND CONSEQUENTIAL DAMAGES. IN FEBRUARY 1971 A CHANGE TO DOD'S PROCUREMENT POLICY WAS PROMULGATED WHICH AIMED AT REDUCING GOVERNMENT PROCUREMENT COSTS BY LIMITING THE CONTRACTORS RISK. THE KEY CHANGE PROVIDED THAT: "IT IS THE POLICY OF THE DEPARTMENT OF DEFENSE GENERALLY TO ACT AS A SELF-INSURER FOR LOSS OF OR DAMAGE TO PROPERTY OF THE GOVERNMENT OCCURRING AFTER FINAL ACCEPTANCE OF SUPPLIES DELIVERED TO THE GOVERNMENT AND RESULTING FROM ANY DEFECTS OR DEFICIENCIES IN SUCH SUPPLIES." THEREFORE, THE POLICY OF THE GOVERNMENT ACTING AS A SELF-INSURER TO REDUCE COST IS A LONG-STANDING ONE WITH THE DEPARTMENT. THIS WAS SUBSEQUENTLY SUPPORTED AND REINFORCED BY THE CONGRESSIONALLY ESTABLISHED COMMISSION ON GOVERNMENT PROCUREMENT IN 1972.

THE DEPARTMENT'S USE OF WARRANTIES IN RECENT YEARS IN SITUATIONS WHERE WE JUDGE THEM TO BE BENEFICIAL HAS BEEN QUITE SUBSTANTIAL. BASED ON A 1979 SURVEY ONE THIRD OF OUR 4.1 MILLION TYPES OF ITEMS IN INVENTORY ARE COVERED BY SOME FORM OF WARRANTY. EXISTING COMMERCIAL WARRANTIES ARE GENERALLY INCLUDED IN OUR PURCHASE OF COMMERCIAL PRODUCTS. WE EXERCISE OUR RIGHTS UNDER THESE COMMERCIAL WARRANTIES WHERE IT IS COST EFFECTIVE TO DO SO. FURTHER, ALL OF OUR CONTRACTS AND PURCHASES HAVE MANDATORY INSPECTION CLAUSES WHICH PROVIDE FOR PRE-ACCEPTANCE INSPECTION TO DETERMINE CONFORMITY TO

CONTRACT REQUIREMENTS. THESE CLAUSES DO NOT EXTEND BEYOND ACCEPTANCE EXCEPT TO PROVIDE SUBSEQUENT COVERAGE INVOLVING LATENT DEFECTS, FRAUD, OR GROSS MISTAKES THAT AMOUNT TO FRAUD.

THE DEPARTMENT ALSO ENTERS INTO A VARIETY OF PRODUCT PERFORMANCE AGREEMENTS OR GUARANTEE ARRANGEMENTS IN WHICH WE SPECIFICALLY TAILOR THEIR APPLICATION ON A CASE-BY-CASE BASIS. PRODUCT PERFORMANCE AGREEMENTS ARE A FORM OF INCENTIVE THAT WE USE SELECTIVELY TO MOTIVATE A CONTRACTOR TO ENHANCE THE PEFORMANCE OF THE PRODUCT, AND TO ENHANCE SUPPORTABILITY DURING INTERIM CONTRACTOR SUPPORT BEFORE TRANSITIONING INTO ORGANIC SUPPORT.

EXAMPLES OF PERFORMANCE AGREEMENTS/GUARANTEES INCLUDE VARIOUS TYPES OF RELIABILITY IMPROVEMENT WARRANTIES (RIW) WHICH ARE USED TO IMPROVE RELIABILITY AND REDUCE SUPPORT COSTS. THESE HAVE BEEN EFFECTIVELY USED, FOR EXAMPLE, BY THE AIR FORCE IN THE ACQUISITION OF TACAN RADIOS AND SELECTED ELECTRONIC COMPONENTS ON THE F-16.

ALTHOUGH RIW HAS BEEN SUCCESSFUL IN HELPING TO ACHIEVE RELIABILITY GOALS, WE MUST RECOGNIZE THAT TRADE-OFFS ARE INVOLVED. FOR THE GOVERNMENT TO INTRODUCE THESE TYPES OF INCENTIVES, HARDWARE ACQUISITION COSTS MAY BE INCREASED, AS WELL AS ADMINISTRATIVE COMPLEXITY. FOR THE CONTRACTOR, THERE IS PRICING RISK BECAUSE OF COMPETITIVE PRESSURES, OPTIMISTIC R&M ESTIMATES, UNFORESEEN OPERATIONAL STRESSES, AND MISHANDLING THAT MAY OCCUR IN THE FIELD.

NEVERTHELESS, WE CONTINUE TO USE THE RIW APPROACH SELECTIVELY AND OFTEN COMBINE IT WITH A MEAN TIME BETWEEN FAILURE GUARANTEE (MTBF). OTHER WARRANTY VARIANTS TO MTBF MAY INVOLVE MEAN TIME TO REPAIR (MTTR) AND MEAN TIME BETWEEN UNSCHEDULED REMOVALS (MTBUR).

OTHER TYPES OF WARRANTIES SELECTIVELY USED ARE: . WARRANTY OF SUPPLIES (SIMILAR TO A STANDARD COMMERCIAL OFF-THE-SHELF WARRANTY) WARRANTY OF TECHNICAL DATA TO ENSURE THAT TECHNICAL DATA CONTRACT REQUIREMENTS ARE MET, AVAILABILITY GUARANTEES, AND LOGISTIC SUPPORT COST COMMITMENT (LSC) TO ACHIEVE LOGISTIC SUPPORT COST GOALS.

WITHOUT EXCEPTION WARRANTIES AND PRODUCT PERFORMANCE AGREEMENTS AND GUARANTEES COST MONEY, WHETHER IT IS EXPLICITLY IDENTIFIED OR WHETHER IT IS INCLUDED IN THE PRICE OF THE END ITEM. IT HAS BEEN A LONG-STANDING DOD POLICY TO ANALYZE THE COST BENEFITS OF A WARRANTY APPLICATION AND IDENTIFY THE TRADEOFFS THAT ARE RELEVANT. OUR EXPERIENCE HAS SHOWN THAT: 1) WARRANTIES ARE BEST APPLIED IN A COMPETITIVE ENVIRONMENT, 2) WARRANTIES WORK BEST WHEN SELECTIVELY APPLIED TO SPECIFIC COMPONENTS RATHER THAN COMPLETE SYSTEMS, and 3) THE EQUIPMENT SHOULD BE WELL-DEFINED AND BASED ON ESTABLISHED TECHNOLOGY. THE USE OF WARRANTIES MUST BE CAREFULLY MANAGED ON LARGE SYSTEMS TO INSURE THAT THE CORRECTION OF ONE DEFECT DOESN'T NECESSITATE THE REPLACEMENT OF OR MODIFICATION TO OTHER ITEMS OF EQUIPMENT (i.e. GROUND EQUIPMENT, SUPPORT EQUIPMENT OR, TRAINING EQUIPMENT). IN ADDITION, THE APPLICATION OF WARRANTIES IS ALSO BEST SUITED TO FIXED-PRICE TYPE OF CONTRACTS BECAUSE COST REIMBURSABLE TYPE CONTRACTS RESULTS IN THE GOVERNMENT PAYING ALL OR PART OF THE COST TO CORRECT THE DEFICIENCY.

WE ARE CONTINUING TO REFINE OUR VIEWS ON THE APPLICATION OF WARRANTIES BASED ON OUR OWN EXPERIENCE AS WELL AS THAT OF THE PRIVATE SECTOR. FOR EXAMPLE, DURING 1979 THE AIR FORCE CONDUCTED A MAJOR REVIEW WITH INDUSTRY TO EXAMINE THE APPLICATION OF COMMERCIAL TYPE WARRANTIES TO MILITARY HARDWARE. THEY ESTABLISHED A SET OF PRINCIPLES TO ACT AS A GUIDE IN THEIR COMBINED EFFORTS TO IDENTIFY THE REQUIREMENTS FOR FIELDING A QUALITY PRODUCT. SUBSEQUENTLY, THE AIR FORCE PUBLISHED A PRODUCT PERFORMANCE AGREEMENT GUIDE AND ORGANIZED A PRODUCT PERFORMANCE AGREEMENT CENTER THAT IS NOW FUNCTIONING TO ASSIST MANAGEMENT OFFICES IN THE SELECTIVE APPLICATION OF PERFORMANCE AGREEMENTS AND WARRANTIES.

THE DEFENSE ACQUISITION IMPROVEMENT PROGRAM HAS INCLUDED FIVE SEPARATE MANAGEMENT INITIATIVES DESIGNED TO IMPROVE THE SUPPORT AND READINESS OF OUR WEAPONS SYSTEMS. RECENTLY, DEPUTY SECRETARY THAYER COMBINED THESE INITIATIVES INTO A SINGLE PRIORITY INITIATIVE ON SUPPORT AND READINESS TO WHICH HE HAS COMMITTED HIS PERSONAL ATTENTION. AMONG THE VARIOUS ACTIONS BEING TAKEN TO IMPLEMENT THIS INITIATIVE ARE EFFORTS TO INCORPORATE PLANNING FOR IMPROVED SUPPORT AND READINESS IN THE FRONT END OF THE ACQUISITION

PROCESS. ACQUISITION STRATEGIES MUST NOW BE RESPONSIVE TO THIS INITIATIVE BY ESTABLISHING RELIABILITY AND SUPPORT GOALS EARLY IN A PROGRAM. SOURCE SELECTION CRITERIA IS BEING REVISED TO EMPHASIZE THE IMPORTANCE OF RELIABILITY AND MAINTAINABILITY. SELECTIVE USE OF AWARD FEE ARRANGEMENTS AND COST INCENTIVES FOR INTERIM CONTRACTOR SUPPORT ARE BEING USED TO FOCUS ATTENTION ON THIS AREA. THESE ACQUISITION IMPROVEMENT APPROACHES COMPLEMENT THE EMPHASIS WE CONTINUALLY PLACE ON "DESIGNING IN RELIABILITY." PROGRESS IS BEING CONTINUALLY MONITORED. FOR EXAMPLE, CHANGES TO SIX MAJOR PROGRAMS (DIVAD, AH-64, GLCM, ASPJ, AHIP, AND AMRAAM) CONCERNING SUPPORT AND RELIABILITY WERE DIRECTED DURING RECENT DSARC MILESTONE MEETINGS.

MANY OF THE AFOREMENTIONED PRODUCT PERFORMANCE AGREEMENTS AND GUARANTEES ARE SIMILAR TO THE TYPES USED BY COMMERCIAL INDUSTRY. HOWEVER, WE MUST KEEP IN MIND THE DIFFERENT ENVIRONMENTS IN WHICH EACH OPERATES. WHAT IS APPROPRIATE IN THE PRIVATE SECTOR MAY NOT BE IN THE PUBLIC SECTOR. A COMMERCIAL COMPANY IS IN CONTROL OF THE DESIGN OF ITS PRODUCT, AND OF ANY CONFIGURATION CHANGES. THIS ALLOWS FOR CONTINUOUS TRADE-OFFS OF PERFORMANCE IMPROVEMENT, WARRANTY OBLIGATION AND MARKET PENETRATION. WARRANTIES ARE FREQUENTLY UTILIZED AS A MARKETING TOOL USED IN A COMPETITIVE ENVIRONMENT. ALSO, MOST WARRANTED COMMERCIAL PRODUCTS INVOLVE LIMITED APPLICATION OF STATE-OF-THE-ART TECHNOLOGY.

A COMMERCIAL PRODUCT USUALLY INVOLVES A PLANNED PRODUCT IMPROVEMENT EFFORT WHICH REQUIRES AN INVESTMENT TO IMPROVE THE PRODUCT AND OFFSET FUTURE WARRANTY CLAIMS. THE INVESTMENT FOR PRODUCT IMPROVEMENT IS GENERALLY HEAVY THE FIRST YEAR OF DELIVERY AND IS FURTHER INFLUENCED BY THE MARKETING STRATEGY OF THE COMPANY.

THE GOVERNMENT, ON THE OTHER HAND, OPERATES IN A DIFFERENT ENVIRONMENT. THE TECHNOLOGY INVOLVED IS GENERALLY STATE-OF-THE-ART BECAUSE WE MUST BE RESPONSIVE TO THE THREAT. CHANGES IN THE THREAT OFTEN RESULT IN CHANGING MISSION PERFORMANCE NEEDS. MANY SPECIFICATIONS, CONSEQUENTLY, ARE UNIQUE TO EACH PIECE OF HARDWARE AND USUALLY INVOLVE EXTREMES OF TEMPERATURE, VIBRATION AND OTHER OPERATIONAL CONDITIONS SELDOM EXPERIENCED BY COMMERCIAL PRODUCTS.

OUR CONFIGURATION CONTROL AND TRADE-OFFS ARE USED TO MAXIMIZE OUR PERFORMANCE AND SUPPORTABILITY REQUIREMENTS AT REASONABLE COST. MUCH OF OUR EQUIPMENT DOES NOT LEND ITSELF TO A SEQUENTIAL SERIES OF PRODUCT IMPROVEMENTS AS IN INDUSTRY. WE MAINTAIN AN EXTENSIVE TEST INSPECTION SYSTEM DURING DEVELOPMENT AND PRODUCTION, AND WE RELY HEAVILY ON THIS SYSTEM TO REMEDY DEFECTIVE PRODUCTS. PERHAPS THE MOST IMPORTANT DIFFERENCE -- THE DEPARTMENT OF DEFENSE HAS PUBLIC ACCOUNTABILITY WHEREAS INDUSTRY HAS PRIVATE ACCOUNTABILITY.

AS YOU KNOW, THE COMMERCIAL SIDE HAS AT TIMES EXPERIENCED SERIOUS PROBLEMS WITH WARRANTIES. THE MAGNUSON-MOSS WARRANTY ACT, FOR EXAMPLE WAS ENACTED IN 1975, (P.L. 93-637, 15 USC 2301) FOR THE PURPOSE OF PROTECTING THE CONSUMER REGARDING COMMERCIAL WARRANTIES. AIRCRAFT AND ENGINE MANUFACTURERS HAVE EXPERIENCED DIFFICULTIES WITH FIELDED EQUIPMENT. THE AUTOMOBILE MANUFACTURES HAVE CONSIDERABLE DIFFICULTY AT TIMES INTRODUCING NEW FEATURES SUCH AS THE BRAKING SYSTEM ON THE 1979 X-CARS. ALL OF THESE PRODUCTS HAVE BEEN COVERED BY SOME FORM OF WARRANTY RELATING TO DEFECTIVE MATERIAL AND WORKMANSHIP. THE QUESTION IS WHETHER WARRANTIES ACTUALLY MOTIVATE A CONTRACTOR TO BE MORE CAREFUL IN THE PERFORMANCE OF A CONTRACT. OUR EXPERIENCE HAS SHOWN THAT GIVEN THE NATURE OF DEFENSE BUSINESS THE USE OF WARRANTIES SHOULD BE APPLIED ON A CASE-BY-CASE BASIS AND SHOULD REFLECT A BALANCE OF RISK BETWEEN THE GOVERNMENT AND THE CONTRACTOR AND THE ATTENDANT COST CONSIDERATIONS.

THERE IS ALWAYS ROOM FOR IMPROVEMENT RELATIVE TO OUR USE OF WARRANTIES AND PRODUCT PERFORMANCE GUARANTEES. THE SUBJECT, AS THE RECORD REFLECTS, HAS BEEN STUDIED PERIODICALLY OVER THE LAST TWENTY YEARS WITH THE LAST IN-DEPTH EFFORT BEING ONLY A FEW YEARS OLD. IN THE MEANTIME OUR APPLICATION OF VARIOUS TYPES OF WARRANTIES HAS EXPANDED SIGNIFICANTLY WITH INCREASING SOPHISTICATION.

IN SUMMARY, ONE OF OUR MAJOR ACQUISITION OBJECTIVES IS TO DELIVER SYSTEMS THAT ARE RELIABLE AND HAVE HIGH QUALITY. WE REGARD WARRANTIES AS AN IMPORTANT TOOL. THEY COST MONEY, AND WE TRY TO BE SURE THAT IT IS WORTH IT WHEN WE USE THEM. THE CONDITIONS UNDER WHICH THEY SEEM TO MAKE SENSE EXIST FOR ABOUT ONE THIRD OF OUR INVENTORY ITEMS, AND WE USE THEM IN THESE CASES. WE BELIEVE OUR POLICIES MUST REMAIN FLEXIBLE SO THOSE WHO KNOW THE MOST ABOUT AN INDIVIDUAL PROCUREMENT CAN DECIDE WHICH TOOLS WILL WORK BEST IN EACH CASE. WE WILL CONTINUE TO REVIEW OUR EXPERIENCE AND EXCHANGE LESSONS LEARNED WITHIN THE DEFENSE COMMUNITY.

### C-5 WING SPAR

Senator **Andrews**. Thank you very much. I will yield to my colleague in just a moment.

Let me point out a couple of things that you mentioned in your synopsis.

First of all, you stress the fact that Government procurement is different from the civilian side of the economy because you must have the right to change your specs. I think those are almost your exact words.

That is fine, but let us go back to the C-5 days. Maybe I am trying to be too practical, but at the time the C-5 was in the design somebody in the Pentagon decided that they wanted to save a little weight, so they took some of the strength out of that wing spar.

That was a decision made in the Pentagon. Because you did that we had to have a $1.4 billion wing fix paid for by us. Now, maybe I am old fashioned, maybe I am too practical, but it seems to me if Lockheed, which has a great reputation as a company, had had a warranty requirement, they would have said, "Uh-huh, no way. We know what will happen if we lessen the strength of that wing spar. We are not going to do it."

I say it might be old fashioned to lean on reliability of American industry. I think your plea for having the Government maintain the right to change goes right down the path that has led us to some of these problems.

You mentioned also that warranties are going to cost money. Time magazine on August 22 had an article by Gen. John Wickham, Jr., certainly a person you are aware of. Let me quote General Wickham. He said:

> There are some things I can get emotional about and quality control is one of them. The Department of Defense could save billions if we could have better quality assurance.

Now you say you are getting that quality assurance through your inspectors.

General Wickham seems to share the opinion of those of us on this committee that it is not working too well. Maybe we ought to put some liability for that quality control back on the manufacturer through the type of warranties that are used in the civilian sector.

Because I wanted to check some of this out I spent a lot of time during the month's recess going from plant to plant. I was in a helicopter plant and they make helicopters, of course, for the military and also make them for the civilian side.

Talking to the key people there they said, "When we see something that needs changing, and we do every month or so, down the production line on the helicopter, we change it for the civilian side."

I said, "You change it for the military side?"

He said:

> It is almost impossible. We have to go through 17 different ways of paper shuffling and all the rest. By the time we get a change order out, somebody probably disapproves it.

These are the observations I picked up in some of my travels.

You also mentioned that warranties cost money. The Air Force said that the warranty we put on in this committee and was signed into law by the President to require 3,000 tactical cycles worth of warranty on the derivative fighter engine procurement which will amount to $10 billion in the next 8 years, your own Air Force says you will have 2 billion dollars' worth of savings because of that warranty.

We kind of like that sort of statement because we think that the taxpayers need that saving. We think it also will give us more dependable jet fighter engines.

These are some of the things that appear to us on this side of the table to suggest that maybe we ought to change the way we have been doing things and move more toward the warranty system because we do need systems that work.

### WARRANTIES ON COMMUNICATIONS SATELLITES

You say yours are much more, shall we say, state of the art, higher quality. As you pointed out, low tech stuff we can get warranties on. How then do the communications satellites and all of these other things have warranties?

That certainly is a state of the art. NASA uses warranties regularly.

In my office there was an official of Intelsat, the communications satellite firm, yesterday afternoon talking about the warranty systems that they had with incentives to the manufacturer. If those satellites keep working 2 or 3 years after they go up, they share in an additional time span, that additional dependability.

Why can't we get planes and tanks on the same basis? These are some of the questions we would like to have answered during this hearing by some of those who have accompanied you and also by some of the outside witnesses.

I would like to yield to my colleague, Senator Rudman, who is under severe time constraints. In fact, the problem we face this morning is the tragedy of our former colleague, Senator Jackson's death.

This morning, of course, many of the people who would be here because of their deep interest in this subject are on the floor eulogizing Henry Jackson this morning.

Senator Rudman has that same kind of time restraint.

Senator.

Senator **RUDMAN**. Thank you, Mr. Chairman.

I believe at the outset I would like to address several questions to Mr. Lorber in light of your testimony, Ms. Gilleece.

I think I would like to possibly take some of the things you have said and put them into some practical language in terms of what the Army is doing.

### ABSENCE OF WARRANTIES ON M-1 TANK

Mr. Lorber, had the Army required express warranties on (a) the powerplant for the M-1 tank, and (b) the transmission for the M-1 tank, from your experience with that program, do you think that we might have solved the enormous problems that we have had with them? If they are totally solved today, if the manufacturers had been told, "These are the field circumstances, we are marrying a turbine to a transmission, never before done, and we are going to require warranties of an express nature. We want you to know, that those warranties will be in effect."

Do you think we might have had a better experience, if we had done that?

Mr. LORBER. Senator Rudman, from my personal experience with the program and recent discussions with my colleagues who are responsible for product assurance on the tank, I would have to say we do not believe we would have solved the problem earlier. The problem involved required the experience that we gained in testing.

Data you refer to are the results from early tests. As a result of these test data, we have gone back to the contractors and they have redesigned the system to improve it. The transmission is no longer a problem and is working more than adequately.

The engine is now under a durability test and is performing well. This required substantial engineering effort by the contractor and the subcontractor for the engine and transmission. The contractor redesigned until he met our specification requirements. I believe it would have taken the same amount of time to accomplish the design improvements.

Senator RUDMAN. I expected that answer and I don't disagree with the answer. What I have essentially questioned is directed at the point of asking a contractor to do something that had never been done before, that is, in a land vehicle. To marry a turbine engine to a transmission with all of the torque and all the strain that it puts on both those instrumentalities. Is it your point that you would not have solved it any faster?

Mr. LORBER. That is right.

Senator RUDMAN. Have you solved it now?

Mr. LORBER. Yes, sir.

### WARRANTIES ON M-1 TURBINE AND TRANSMISSIONS

Senator RUDMAN. Do we currently have warranties on the M-1 turbine and transmissions?

Mr. LORBER. No, sir.

Senator RUDMAN. Why not?

Mr. LORBER. I think Ms. Gilleece explained the basic policy of the Defense Department.

Senator RUDMAN. I understood what she said, and I have taken most of what she has said out of the way. We have now eliminated what she stated. She has explained what the problems were. I agree with her statement and with what you have said. They are now totally separated.

You have just testified that it is now working and that it is under operational testing. It works and I am a strong supporter of the M-1 tank. I want warranties on the transmission and engine. What is wrong with that?

Mr. LORBER. I believe we would not gain any improved quality as a result of a warranty today for the transmission and engine.

Senator RUDMAN. What would you say 3 years from now when after all of the tests and all of the problems, we start to have serious problems in the field, and the taxpayers are now going to pay for the replacement of the transmission?

Looking back with 20-20 hindsight, do you think some kind of warranties might be in place?

Mr. **Lorber**. Warranties without an aggressive quality assurance effort will not provide a quality product to the soldier. The warranty provides for repair replacement after failure, sir.

Senator **Andrews**. That is the point we are driving at. If you have a warranty, you have better quality control because they do not want to have to fix it. If the incentive is on the manufacturer for a warranty, you get the up-front quality control.

Senator **Rudman**. Let me follow that line of questioning with you.

I understand your answer. What you are saying is that for the soldier in the field under a combat situation, if the turbine fails while he is engaged with the enemy's armored vehicles, the warranty will not do him very much good. We all understand that. That is not the purpose of our study.

Does it do the United States and good if we have 100 tanks fail, and we have to pay to replace them? The stockholders should have to undertake that.

Mr. **Lorber**. It is our job to protect the soldier's equipment from failure.

### FINANCIAL AND COMBAT ISSUES

Senator **Rudman**. Those are two separate issues. One is a combat issue and the other is a financial issue. Let us discuss them separately.

I served in the infantry in Korea. When my M-1 jammed, I did not give a damn if there was a warranty on it. I had to put my head down and fix it. Let us talk about who pays for it.

Mr. **Lorber**. Let me preface my remarks. As a soldier with an M-1 rifle, you would like to have confidence that the Department providing you the rifle has taken the necessary action to assure that you have a good rifle. We like to make our investment up front by testing our material periodically to make sure that the quality remains at the right level in production.

I can tell you now the quality of the tank is good. You are asking me how I can be sure that the tank will remain a quality tank as we move down the production line. That is through our testing program and through our quality assurance program.

Our objective is to make sure that I test periodically to guarantee that that tank will meet the requirements downstream.

Senator **Rudman**. We have no disagreement whatsoever. As a matter of fact, I think we are in agreement. If you have confidence that your systems do provide adequate checks and balances all along the line, and obviously you are doing that, then there is nothing wrong with requesting a manufacturer to put a warranty on those two items, is there?

Why can't you say yes, Mr. Lorber? It seems pretty obvious to everybody in this room. What is wrong with that?

Mr. **Lorber**. Warranties, when properly executed, provide additional incentive to the contractor to produce a quality product.

When it is cost effective, we should have a warranty.

Mr. RUDMAN. I have some problems with Senator Andrews' amendment and I will be talking more about them. I have also done some investigation of this, because I think it is very important. I think the point that you both make is a very valid one.

I did not receive a satisfactory answer from you, Mr. Lorber, as to why, at the point that it is deployed, we can't require warranties?

I will turn to you, Ms. Gilleece, to see if you would like to respond to that.

Ms. GILLEECE. Mr. Chairman and Senator Rudman, let me just mention that the Department has overall policy responsibility as defined by my statement.

Within the Department we have decentralized management. It would be up to the individual service to determine when it is appropriate to impose a warranty on a particular item. That is not to say, however, that we in DOD do not review the individual item when it arrives at DSARC.

### DSARC PROCESS

In my prepared statement I specifically defined where the DSARC process required certain provisions in six major programs concerning support and reliability that were directed toward the end of reliability and maintainability.

As to the individual programs, I would have to ask the services to answer.

Mr. RUDMAN. Let us take it from the specific to the general within your area of responsibility. I understand your statement and I agree with a good part of your opening statement.

Many contractors who I think are hard working, honest, and good suppliers to the Government, have made that point to me. The very same point that you have made in your statement.

My question is this: Once that system has been released for production and it is going to be deployed in the field, exempting those parts of the products which are going to get abuse and which nobody in their right mind would warranty—at that point couldn't you have warranties on a much higher percentage of your systems components than you have now? That is my question.

General Weiss is raising his hand. Maybe he would like to answer this question.

Ms. GILLEECE. Before he does, let me mention, generically, I indicated that warranties are to punish for poor performance. What Mr. Lorber was trying to suggest was that he wishes to focus on quality-assurance programs, on the incentives to have the contractor perform properly.

One of those may have been a warranty, but warranties are costly. Thus your end is the same. The question is how you arrive there. What is the best equipment?

It may be for a particular program that the warranty is the appropriate method. It may be for another program it is the quality-assurance program that is appropriate.

General WEISS. I have been a practitioner of contracts and manufacturing for 27 years; 25 of those years I have been negotiating contracts. In a situation similar to what Mr. Lorber was talking about and what, Senator Rudman, you are talking about, you are in a very difficult position.

You are starting to field the end-items. You are in production and you are dealing with a single contractor who looks at the risk of a warranty like an actuary in insurance is trying to put a price tag next to that risk.

You, from the taxpayer's point of view, with your technical people are trying to evaluate what the cost of that risk should be. In many cases, not all cases, and I am not sure this may be this specific Army case, you can't come to agreement.

### FIGHTER ENGINES

Now on fighter engines we started back in 1974 and 1975 to try to get warranties. In 1978 we got the first warranty on the F-100 engine. At that point in time, we had 5 or 6 years of some production experience approaching 1,000 units delivered. At that point in time I was part of the negotiation process in a sole-source environment and after a very lengthy negotiation process we came to an agreement as to what a fair and reasonable price was for a small warranty compared to the type we are looking for now.

Let me say this: That to this point in time I am not sure as an Air Force general, as a businessman, and as a taxpayer, that that warranty is truly cost effective. I know I am getting greater durability than I ever got before.

But what would happen if GAO or some other agency came in and found out I paid $5 million for the warranty and the contractor only spent $2½?

I think I got a good deal. I got a warranty which motivated the contractor to do things which enhanced durability of those engines, but in fact I may have given that contractor a profit twice as much as his cost.

Senator **Rudman**. That, of course, is that particular system and we are looking at a $245 billion outlay.

### PRODUCT PERFORMANCE AGREEMENT

General **Weiss**. It is an assessment of risk from two different perspectives. What we are trying to do in the Air Force, because it is such a complex subject, we started out, in 1980, with a concept of finding out how well we are doing in warranties. We don't call them warranties. We call them product-performance agreements.

A warranty is a negative term. Warranty is trying to force a contractor to make good on something he delivers after we have inspected it. A product performance agreement does both. It does that, but it provides the positive incentive to grow or enhance the performance and durability of the product.

We have had in place now for about 1 year a Product Performance Agreement Center. It is developing techniques in evaluating how well we have done on the warranties and product-performance agreements we have put in being.

Senator **Rudman**. General, do you think that in terms of competition between two suppliers supplying an identical component which we have more and more of, that when we now impose a requirement of warranty, that would tend to bring out the very best of one of those contractors who has confidence in his ability to produce that product?

General WEISS. Yes.

Senator RUDMAN. You see that is the other side of that coin.

General WEISS, Absolutely, sir. Competition makes the proposal to be as realistic as possible. There is a fear, I add, and that is when two companies in a very tight competition sharpen their pencils to the point where they sacrifice possibly their company.

Senator RUDMAN. They also have to sharpen their pencils on the warranties.

Mr. Chairman, I do have a meeting at 11 which is very important and I am going to have to leave. I think that the point I wanted to make today, was made. I believe there is ample room to do what you want to do and meet some of the objections. The fact of the matter is that we are deploying many systems after adequate testing.

With all due respect to Mr. Lorber's organization and all the testing and evaluation that goes on, which is a very difficult business, it seems to me that we get out in the field after some pretty exhaustive tests and find that things don't work.

I talked to someone here before the hearing. One of the warranties you certainly could get from the Bradley is that it ought to float. If it didn't, it probably was in breach of warranty and that is the very kind of point I am making.

The paint on the M1 tank I do not make abstractly. I make it for a specific reason. I would hope, Mr. Chairman, that you, the chairman of the subcommittee and the Defense Department could work on this problem and come up with a satisfactory answer because I think it is an idea whose time has comeup.

Maybe this amendment is cast too broadly, but certainly we can do better than what we are doing.

Thank you very much for giving me all this time.

### WARRANTIES FOR DEFENSE DEPARTMENT

Senator ANDREWS. I appreciate your contribution. I know the Senator is as concerned as I am on this. We will work out some kind of language so that we can drag the Defense Department, maybe kicking and screaming, into the warranty concept, but one way or another I think we are going to get it.

I might point out to my colleague and good friend, too, that another part of this Time magazine article I was citing points out that they had late delivery on the engine for the M1 tank, but they point out the Army's agreement with AVCO contains no penalty clauses for late delivery, a loophole that General Wickham called a contract deficiency.

I might also point out, Madam Secretary, that you had a reliability improvement warranty for the T-700 engine used in the Black Hawk and advanced attack helicopters. With the exception of miscalculation on the contractor's liability ceiling, the warranty did in fact stimulate early solution of startup production problems and accelerated the achievement of mature engines.

There are the types of things for which we salute you when you do them. We just can't understand why you don't do it in a broader environment.

I think we also ought to point out when you are talking about getting the proper pricing on that jet engine or would GAO look in afterward and say you are paying for too much, if you are getting reliability and that service man or woman out there knows they have a reliable system, that is your No. 1 goal. That is the goal we are not meeting.

Cost is No. 2. I think we can get both of these going. With the warranty on that engine, General, don't you feel you would have had through the free enterprise system—let us say company A is building this jet engine and they are giving a warranty, say 3,000 tactical cycles, you are not sure whether that package is containing more money than it ought to contain, don't you think company B will come up and say, "Hey, look, we can build this engine, give you that same warranty for less money," and then aren't you going to move over and give some of the business certainly to company B—under the free enterprise system?

Has the free enterprise system died in this country? I don't think so.

General WEISS. No, sir, it has not.

Senator ANDREWS. Would not the warranty on the engine be better because it assured performance by the company who came in because the company who had the contract knew it had to meet the warranty so there would be no cheap shots in the challenge?

If they have a warranty they have to live up to, they have to perform.

General WEISS. I think we have seen that in the history of the jet engine business since we started promoting or facilitating, with Congress' help, competition in the alternate fighter engine. We have seen willingness on the part of the American industry to participate in enhancing the warranty.

Again, the realism comes about through competition. That is one way. The ultimate decision on which way you go should not solely be based on warranties. It should be based on a number of factors in source selection.

Senator ANDREWS. Let me get back to the warranty. The law calls for 3,000 tactical cycles under the derivative fighter engine contract procurement. I understand that doesn't insist on that 3,000 tactical cycles.

Do you have an RFP out for these derivative fighter engines that does not require 3,000 tactical cycles?

General WEISS. No, sir.

Senator ANDREWS. And if so, how do you intend to pay for the engine?

General WEISS. We do have an RFP out, of which I have a copy here in part 2 of the specification, Special Provisions, which I can read it to you.

Senator ANDREWS. If you will include a copy for the record. It was called to my attention.

[The information follows:]

## Copy of RFP

### ALTERNATE FIGHTER ENGINE REQUEST FOR PROPOSAL F33657-83-R-0105 SPECIAL PROVISIONS SECTION H, PARAGRAPH 16

Part II—Combustor/High Pressure Turbine Warranty

1. Warranty: In addition to other warranties provided in this paragraph H.16, the Contractor warrants, subject to the conditions and exceptions of Part I, para 5 that any combustor and/or high pressure turbine delivered hereunder shall operate and be free of defects in accordance with the criteria established by applicable Technical Orders for eight (8) years from original delivery or the first 3000 equivalent TAC cycles, whichever occurs first.

### COMPLIANCE

General Weiss. Eight-year requirement or 3,000 tactical cycles, whichever occurs first. It is a requirement.

As a matter of fact, the Air Force to insure our compliance with the law has given that specification to our general counsel and they have reaffirmed that we are in compliance.

Senator Andrews. That answers that question.

I am aware that few weapons are negotiated with fixed-price contracts. However, even under a cost reimbursement type contract, as you mentioned in your opening statement, Madam Secretary, does this dissuade negotiations for a fixed price warranty?

In other words, does this type of contract prohibit making the manufacturer provide cost schemes for various types of fixed price warranties that DOD could enforce?

Ms. Gilleece. Within a cost reimbursement contract?

Senator Andrews. That is right.

Ms. Gilleece. We have not examined that particular provision, but I would not at this particular moment believe that would preclude that in a contracting environment.

General Weiss wishes to comment also, Mr. Chairman.

Senator Andrews. Fine.

### COST-TYPE BASIS

General Weiss. Sir, let me take issue, if I may.

I know of no major weapon system program that is in production that is on a cost-type basis. We do have many in development that are on a cost-type basis.

The difficulty, if you are in a cost environment, of establishing a warranty is that a contractor can charge the warranty to the cost type part of the program, if such a contract is in existence, as well as charge you under the firm fixed price.

He has an option. You have a cost accounting problem of how you allocate cost. Therefore, we teach, train, and tell our people in the field that normally if you have a cost program, a warranty is inappropriate because of this comingling of cost.

You are paying a fixed price for a warranty and who is to say that he is not also charging you under the cost reimbursement feature of the contract to do the same corrective work?

Senator Andrews. You have been in this procurement business for a long time, 25 years. If warranties were imposed on military equipment with no commercial counterpart, are you prepared to say no U.S. companies would submit a bid, given such a requirement and risk?

General **Weiss**. Could you repeat that?

Senator **Andrews**. If warranties were imposed on military equipment with no commercial counterpart, are you prepared to say that no U.S. companies would submit a bid, given such a requirement for warranties?

General **Weiss**. No, sir, I am not prepared to say that. It would depend on the maturation of the product and how fully developed the product is and what experience we would have. That would determine whether industry would be prepared to submit warranties under the product performance agreement.

Senator **Andrews**. We could get into an agreement on what our colleagues in the authorizing committee would view as their turf because you have the old argument about the knee of the curve when you go up there and how far beyond that knee do you go and you end up getting all kinds of lack of reliability to get that last ounce of performance.

I remember in the late 1960's and 1970's when Bill Rukelshaus was first head of EPA. I was on the House committee that funded him. We used to talk about cleanup of our streams. We could clean up 90 percent of the pollution for 10 percent of the cost of cleaning up 100 percent of the pollution. It also figures out that way.

I think in defense weaponry if you would stay back of the knee of the curve, you would probably have much more reliability of fighter systems out there for our Armed Forces. But that is a question for another committee to argue and not ours.

We are the banking committee that really in effect is supposed to tell you to get a dollar's worth of value for the dollar you invest in weapons systems that you decide have been developed to the point where they are in fact going to be reliable out in the field.

Western European manufacturers, Madam Secretary, inform me that it is considered standard practice to warranty all military equipment.

How is this possible in Western Europe and considered impossible in the United States?

You know we have the same heritage. We are tied together in NATO. We have a common defense front. In fact, we have a $130 billion a year commitment to NATO.

How come they just take it as standard operating procedure and we get all shook up about warrantying military equipment?

Ms. **Gilleece**. I can't answer for the European market.

The only thing I can tell you is that the definition when it is appropriate to use the warranty within our procurement mode depends on the development of the program.

As General Weiss mentioned before, when you are in a clear research and development environment and do not have the production background to be able to determine what in fact the particular item can do, then a warranty may very well not be appropriate.

However, when you do have the production experience, then in fact a warranty may be appropriate.

Senator **Andrews**. Thank you very much. We appreciate your appearance here this morning.

I think now we probably should move to our nongovernment witnesses. There may well be other members of the committee who will have questions to submit, Madam Secretary, for the record so that we can have a more complete record.

# NONDEPARTMENTAL WITNESSES

## USAir

### STATEMENT OF JERRY SMITH, ASSISTANT VICE PRESIDENT, MATERIAL SERVICES, USAIR

### ACCOMPANIED BY JACK KING, ASSISTANT VICE PRESIDENT, USAIR

#### INTRODUCTION OF WITNESSES

Senator **Andrews**. I think at this time in deference to our outside witnesses we should move to them. I would like to call Mr. Jerry Smith, assistant vice president for material services, USAir.

Let me point out for the benefit of those here, the reason we have Mr. Smith, USAir, and Jack King, assistant vice president of USAir here is because the civilian side of our economy tells us that USAir has the best inventory control procedure, cost control inventory of any company in the airline business.

Since we have a lot of questions about inventory control and how to make it cost effective, we thought we might possibly learn a good deal from the gentlemen from USAir.

Mr. Smith, I appreciate your taking the time to come here. We have your statement. Let me assure you it will be included as though given in full for the record. You can summarize it if you care to and leave more time for questions for the record. You may proceed as you prefer.

Mr. **Smith**. We certainly thank you for your kind comments about the USAir inventory system. It is a good system and works very well for us. I will just briefly recap a portion of my prepared statement for the record and then be available for comments.

USAir is a major U.S. airline serving some 60 cities in the United States and Canada. We currently operate a fleet of 117 turbine-powered aircraft on a route structure that is centered in Pittsburgh, Pa., is heavily concentrated in the northeastern part of the country and extends to Florida, Texas, Arizona, and California.

My responsibilities include the procurement of equipment and materials to support the maintenance, flight and ground operations of the airline.

Warranty considerations are an important aspect of any major procurement activity in the airline business. Our operations are such that we must purchase reliable aircraft and support equipment to assure on-time performance to 50,000 customers per day and maintain the lowest possible operating cost.

One way to assure that our suppliers have a commitment to equipment reliability is to negotiate contracts with good warranty provisions.

In many of our aircraft-related procurement activities we are faced with a situation wherein once the decision is reached to purchase from a particular supplier, they may be our single source for that unit or system for 15 or 20 years.

Due to this situation, we feel that it is vital to establish the ground rules for the warranty and reliability relationship during the bid and/or negotiation process. Our experience indicates that a warranty can be obtained for virtually any component, system or piece of equipment.

The difficult aspect of the warranty equation is determining what it is worth. If we structure a request for proposal with unrealistic warranty provisions, the suppliers will either not bid or will overprice their equipment to assure that they do not lose money or warranty claims.

Since many times we are dealing with high technology or new state-of-the-art materials, we try to leave room in our request for proposals to reach a compromise on the warranty considerations.

An approach which has proved beneficial to us is to determine what our technical experts believe is a realistic typical warranty period. This will be used as a base for a proposal. Then we would request prices for additional warranty periods.

If the basic period is not realistic, we would ask for a proposal for 2 years, 3 years, 5 years. That would give us during the negotiation process the ability to:

Assess the supplier's confidence in the reliability of the product.

To really determine if our assessment and design objective is realistic.

And to provide the opportunity to determine if the cost of the longer warranty period is justified.

Also it gives us the ability in advance to determine the cost of our spare parts support requirements.

### WARRANTY ADMINISTRATION SYSTEM

USAir's warranty administration system is probably the most important part. Once you have established a good warranty the most difficult part is administering it.

In our case we have a warranty administration of 4 people administering some 30,000 components and returning about $6 million a year.

Senator **Andrews**. You have only 4 people administering 30,000 parts?

Mr. **Smith**. 30,000 warrantable parts.

Senator **Andrews**. They return $6 million a year to USAir?

Mr. **Smith**. Yes, sir.

Senator **Andrews**. That is a pretty good example, I would think.

Mr. **Smith**. It is a very worthwhile group.

The overall industry warranty pattern has evolved over a period of two or three decades. We generally have no problem at all in the commercial environment getting warranties on workmanship, performance specifications, and design, and in selection of materials and processes.

Various warranty durations might apply to individual parts, components or structures, but the general range has been 12 to 36 months for the categories previously listed. The trend is definitely toward longer duration warranties.

In addition to these waranties, aircraft contracts normally contain a 10-year warranty on major airframe and landing gear components. The specific components are called out in the contracts and warranty reimbursement is handled on a pro rata basis.

The remaining life determines your reimbursement. Those same warranty provisions usually are provisions where we have the right to fix the unit and get reimbursed for the labor and material required.

Also in many cases we have the right to take that to an outside agency and send the bill to the supplier.

### ENGINE WARRANTIES

One area that has become quite complex is the engine warranty aspect. Engine warranties today on certain components may be as low as 1,000 hours and we have some that will go to as much as 25,000 hours with a pro rata reimbursement.

Probably the most challenging aspect of the operation is some of the new performance guarantees that we are monitoring. Today we have engines coming that have material cost guarantees where you have a guaranteed cost of material.

It is a very difficult administrative problem, but it gives you a look into the future and says my cost will be no greater than $x$.

Also guarantee of engine removal rate, fuel consumption guarantees, things that we feel will be very beneficial and give us the confidence that the supplier has a commitment to reliability.

To briefly recap, we feel that virtually anything can be warrantied and that those warranty considerations must be defined very early in the procurement process and the determination of value of the warranty is vital to a good procurement decision.

Thank you.

[The prepared statement of Mr. Smith follows:]

## PREPARED STATEMENT OF JERRY E. SMITH

Assistant Vice President
Material Services

U S AIR, INC.

I am Jerry E. Smith, Assistant Vice President - Material Services for USAir, Inc. USAir is classified as a major U. S. airline by the Civil Aeronautics Board and provides commercial air service to over sixty cities in the United States and Canada. We currently operate a fleet of 117 turbine powered aircraft on a route structure that is centered in Pittsburgh, Pennsylvania, is heavily concentrated in the Northeastern part of the country and extends to Florida, Texas, Arizona and California. My responsibilities include the procurement of equipment and materials to support the maintenance, flight and ground operations of the airline.

Warranty considerations are an important aspect of any major procurement activity in the airline business. Our operations are such that we must purchase reliable aircraft and support equipment to assure on-time performance to 50,000 customers per day and maintain the lowest possible operating cost. One way to assure that our suppliers have a commitment to equipment reliability is to negotiate contracts with good warranty provisions.

In many of our aircraft related procurement activities we are faced with a situation wherein once the decision is reached to purchase from a particular supplier, they may be our single source for that unit or system for fifteen or twenty years. Due to this situation, we feel that it is vital to establish the ground rules for the warranty and reliability relationship during the bid and/or negotiation process. Our experience indicates that a warranty can be obtained for virtually any component, system or piece of equipment. The difficult aspect of the warranty equation is determining what it is worth. If we structure a Request For Proposal with unrealistic warranty provisions, the suppliers will either not bid or will over price their equipment to assure that they do not lose money on warranty claims. Since many times we are dealing with high technology or new state-of-the-art materials, we try to leave room in our Request For Proposals to reach a compromise on the warranty considerations. Areas where flexibility may be meaningful to either the Buyer or Seller include:

- Duration of the Warranty period.
- Should take offs and landings (cycles) be utilized as a measure of reliability.
- When failures occur, how should they be repaired?
  - in-house
  - vendor
  - repair agency
- What is anticipated repair time?
- Spare unit support requirements,
- What will the warranty include?
  - material
  - labor (at what cost?)
  - shipping cost (who pays?)

Each of these elements will have a different value depending upon the type of system, aircraft or material that is being purchased.

Again, we believe that it is vital to prepare the Request For Proposal with enough flexibility to allow dialogue between the potential supplier and the company to assure that our warranty and reliability requirements are realistic. An approach in this area that has proved to be beneficial to us is to determine what our technical experts believe is a realistic or typical warranty period. This would be used as the basis for the proposal. For example, a typical mechanical piece of equipment might customarily have a one year warranty. We would then request that the supplier also provide us with prices for the unit with two and three year warranty periods.

Having various warranty pricing proposals prior to the final negotiation stages of our procurement activity allows us to:

- Assess the potential suppliers confidence in the reliability of his product.
- Determine if our assessment of design objectives was realistic.
- Provides the opportunity to determine if the cost of longer warranty periods is justified.
- Gives us the ability to determine and price out the cost of spare parts support requirements.

Once we have established an acceptable warranty program for an aircraft, system or component, the success of such a program is detmined by how it is administered. USAir's Warranty Administration is fairly typical of the airline industry, even though somewhat smaller in staffing that most other major carriers. The heart of our warranty program is our Warranty Services Department. This organization is comprised of two management and two clerical individuals. Their responsibilities include the development and monitoring of all warranty programs within the Corporation.

The major areas of warranty responsibility include:

- New aircraft
- Spare parts
- Engines
- Engine performance monitoring
- Ground support equipment

Since these people are involved in the development of the Request For Proposal and the supplier selection process, by the time that the procurement decision is made, they already know what will be required to implement and monitor the warranty provisions.

USAir's Warranty Services Department is currently monitoring approximately 30,000 components. We anticipate that the value of our warranty cost recovery program in 1983 will exceed $6 million.

The first vital element in monitoring the warranty of an aircraft, engine or ground support equipment is a complete listing of all warranted components and sub-assemblies. These data must include:

- Description of the unit
- The part number
- The serial number
- The duration of the warranty

This information is then compiled in a master warranty log that can be computer sorted in several different ways. The master warranty log is the link between the Warranty Services Department, our repair shops, vendor shops and outside repair agencies. Whenever a failed unit is returned for repair, the serial number is checked to determine if it is under warranty. If it is, the component may be:

- Returned to the supplier for no charge warranty repair or replacement.
- Sent to an outside repair agency and the cost of the repair is processed as a warranty claim.
- Repaired in our shops and the cost of labor and materials are processed as a warranty claim.

Processing and negotiating warranty claims requires an understanding of the technical aspects of the equipment, knowledge of the contracts and the authority to compromise as appropriate.

Major suppliers of aircraft and equipment to the airline industry have through the years evolved into a warranty pattern. While each customer may negotiate different provisions, a typical warranty might include:

## Aircraft

Components, systems, aircraft structure and parts supplied by others would be warranted by the manufacturer against:

- Defects in material and workmanship
- Conformance to the specification and design criteria.
- Defects caused by selection of materials or processes.

Various warranty durations might apply to individual parts, components or structures but the general range has been 12 months to 36 months for the categories previously listed. The trend is definitely toward longer duration warranties.

In addition to these warranties, aircraft contracts normally contain a 10 year warranty on major airframe and landing gear components. The specific components are called out in the contracts and warranty reimbursement is handled on a prorata basis.

Such aircraft warranty documents usually have a provision whereby the Buyer has the right to make the repairs to the aircraft and submit a verification of labor, materials and other costs to the manufacturer for reimbursement. This type of provision expedites the return to service of the defective system, component, and/or the aircraft.

## Engines

Engine warranties have become quite complex over the past several years and the prognosis is that this trend will continue. The basic provisions are similar to the aircraft agreements, but normally the primary terms are agreed to between the Buyer and the engine manufacturer.

Aircraft engines are warranted for a specific number of flight hours or cycles (take-offs and landings); however, due to the complexity of the turbine engine, the warranty period for some parts may be as low as 1,000 hours for full reimbursement, to as long as 25,000 hours for some components for which reimbursement is handled on a prorata basis.

Probably the most challenging area of warranty administration that has developed in recent years is the expansion of engine performance guarantees. Negotiations with the engine manufacturers have resulted in such programs as:

- Material cost guarantees
- Engine removal guarantees
- Fuel consumption guarantees
- Delay and cancellation rate guarantees

Each of these types of programs would be the subject of negotiations between the Buyer and the Seller. Each such program also requires a commitment to develop the necessary data collection and analytical staff to assure proper administration. The maintenance of the engine is the highest single cost item on the aircraft, so we have committed our resources toward improving this area.

Ground Support Equipment

We have tried to pattern our ground support equipment warranties after the aircraft agreements. However, due to the relatively smaller dollar commitments involved, the term of the coverage is not as long. Generally, we have had no difficulty in getting a one year warranty at little or no additional cost.

Most airline ground support equipment is not produced in a production line environment. The prime manufacturer purchases various components from other sources and assembles equipment to meet our requirements. Past practice had been that the prime manufacturer just passed the sub-contractors warranties on to us. In recent years, we have restructured our purchasing practices so that the prime manufacturer is responsible to us for the warranty of all components. This eases our administrative burden, has provided the manufacturer with additional leverage with his sub-contractors and has produced better warranties for USAir.

To briefly recap the key warranty elements for any procurement:

- Virtually anything can be warranted.
- Warranty considerations must be defined early in the procurement process.
- The determination of the value of the warranty is vital to a good procurement decision.

Hopefully, this overview of an airlines' experience in warranty negotiation and administration will be meaningful input to the record.

### MANUFACTURER DEALING WITH COMMERCIAL AIRLINES

Senator ANDREWS. I appreciate that very much, Mr. Smith. Let me ask a couple of questions.

Do airlines have much difficulty dealing with aircraft manufacturers on defective systems or materials.

Mr. SMITH. Actually it is a very easy relationship. We are always potential customers for future deliveries of aircraft and components. The commercial manufacturers live up to their warranties. They make it quite easy for us to deal with them.

Senator ANDREWS. Are the warranty agreements with major aircraft manufacturers and components suppliers similar?

Mr. SMITH. Quite similar. Again, they have evolved over a period of 20 or 30 years. In a negotiation for a new aircraft you really get down to two or three final items that are basic boilerplate that are very easy to obtain from the manufacturer.

Senator ANDREWS. In other words, you just wouldn't buy an aircraft or an engine without a warranty, as I understand it?

Mr. SMITH. There is virtually nothing that we buy until you get down into the $1,000 or $1,500 items that is not warrantied one way or another and generally for 8 years.

### WARRANTY OF REPLACEMENT ITEMS

Senator ANDREWS. If a component fails prior to the expiration of the warranty period, what warranty does the replacement unit have?

Mr. SMITH. Generally, it would have at least the remaining life of the warranty. If the unit was replaced, it might have a new warranty period.

Senator ANDREWS. As a general rule, are there any things that are excluded from warranty reimbursement?

Mr. SMITH. That usually is a subject of negotiation.

One thing I did notice in the Department of Defense comments is that they do have consequential damage requirements. Generally, we do not have consequential damages covered in the warranty.

### NONMANUFACTURER REPAIR UNDER WARRANTY

Senator ANDREWS. The Defense Department statement included the comment that you could not repair these units if they were far away from the plant in which they were manufactured.

You could not repair them out in the field under warranty. For warranty repairs done by your own shops in the field away from the manufacturer how is the reasonableness of the labor and material charges verified? Do you have any problem with that?

Mr. SMITH. Again our long-term relationship with the suppliers serve us very well in those areas. They generally have a good feel for what it takes to fix the unit.

As long as our request for labor and materials are reasonable, warranty claims are processed very clearly and raise no problem for us.

## COSTS AND RECORDKEEPING UNDER WARRANTY

Senator ANDREWS. How much time does it take to reimburse after warranty is submitted?

Mr. SMITH. Once we have documented it, no more than 30 days unless it is an extremely complex structural problem.

Senator ANDREWS. Do you maintain a warranty log?

Mr. SMITH. Yes. It is a simple computer program. We document every new component that comes in that has a warranty on it by serial number. Whenever that unit comes back in for repair we check against the log. Anything that is done on that is returned to the vendor for reimbursement.

Senator ANDREWS. The people from the Department of Defense mentioned the high cost of warranties. Obviously you are paying for the warranty.

How do you determine the actual value of the warranty? Do you feel you are paying too high a cost?

Mr. SMITH. We do make a tradeoff. That is one important piece of our proposal, to try to bracket what we think a reasonable warranty is and what the supplier thinks it is.

Again, we make steps in our request for proposal that gives them an opportunity to put value on warranty. We might in some cases trade off warranty for something else.

Generally we would have some basic warranty, 1 year or 2 years.

## ENGINE WARRANTIES

Senator ANDREWS. When I first listened to the derivative fighter engine discussion with the two principal manufacturers as well as the program manager and all three sides were talking about reliability and all, I asked the question about warranty and found there was no warranty.

I went back to the office and called a couple of people. I called Al Geer with PanAm and said, "Do you get a warranty when you buy engines for your 747's? How much?"

Five thousand hours.

I called Don Neyer of Northwest. "Do you get a warranty?"

He said, "Of course. Do you think I am nuts?"

Don has that way of talking. He assured me he got a 5,000 flight-hour warranty. Then I asked the question that has been coming up recurrently over the last year or so. I said, "If one gives you a new engine on the plane you are buying, do you then get the same warranty?"

He said, "You bet. We need that warranty more on a new type engine we are not experienced with. We demand and get the same 5,000 flight-hour warranty."

With USAir and your experience, let us say a manufacturer, an engine manufacturer, aircraft manufacturer is coming out with some new engine that has not been in production that long, has not been tested and found totally reliable. Are you able to get and do you insist on that same 5,000 flight-hour warranty?

Mr. SMITH. Yes. In today's environment it is substantially more than 5,000 hours on some components. We would not be spending our stockholders' money very wisely if we didn't get those kinds of guarantees.

Senator **Andrews**. You don't have trouble getting guarantee on new state-of-the-art jet engines?

Mr. **Smith**. No, sir.

Senator **Andrews**. Thank you very much for a significant contribution to our record. I appreciate your taking the time to come down.

Our next witness is Mr. J. A. O'Hara, corporate director of contract administration for the Boeing Co.

## THE BOEING CO.

### STATEMENT OF J. A. O'HARA, CORPORATE DIRECTOR OF CONTRACT ADMINISTRATION, THE BOEING CO.

### ACCOMPANIED BY LEON COPELAND, DIRECTOR OF WARRANTIES, THE BOEING COMMERCIAL AIRPLANE CO.

### COMMERCIAL WARRANTY PRACTICES

Mr. **O'Hara**. I have with me Leon Copeland. Leon is the director of warranties for the Boeing Commercial Airplane Co. Leon is my true expert on commercial warranty practices.

Senator **Andrews**. You know how we do it. We have our expert sitting next to us, too. I appreciate your coming.

I talked to the late Senator Jackson and told him of my feelings about warranties. I appreciate his contacting you and suggesting that you stop by to brief me, as you have done, and also appearing today to share your knowledge in this important area of warranties with us.

Mr. **O'Hara**. That is very kind of you.

Senator **Andrews**. If you have a statement, we will be glad to have it included in the record as though you gave it in its entirety. You can summarize it any way you want so that we can get to questions and further discussion.

Mr. **O'Hara**. Thank you, Senator. I have a statement and I will submit it for the record. I will try to summarize some of the highlights.

As a preface, I can say I am in a position where I can agree with everyting that has been said so far by all the previous witnesses. I can certainly confirm, and I am sure Leon can also, that the relationships between the airline and the manufacturers of commercial airplanes and engines and proprietary components is a very good one.

I do have to point out that it is a kind of fixed relationship in the sense that everybody knows what the rules of the game are. Everyone is organized to play by those rules and with rare exceptions everyone stays inside those boundaries of the rules and the system works to the advantage of all concerned.

Senator **Andrews**. But that system has evolved over a number of decades?

Mr. **O'Hara**. Approximately 25 years is the way I would measure the current jet aircraft era in which the airlines have really grown up and the commercial airplane business has become a thriving and independent business.

Prior to that time it was impossible for anybody to make any profit on commercial airplanes. Even the airplanes were subsidized, as we know.

Senator **Andrews**. I take it the same kind of system did not grow up over the same period of time in the Pentagon in defense purchases of aircraft?

### WARRANTIES IN DEFENSE DEPARTMENT

Mr. **O'Hara**. It didn't. One of the things I am able to agree with is the comment that was made by Senator Rudman before he left in which he said warranty is an idea whose time has arrived.

In our experience so far as the Defense Department is concerned, that time began sometime ago, it began to really take hold and become prominent in defense procurement policy and negotiations and practice in the midseventies. A great deal of effort has been taking place.

I would say that the waranty practice and policy is accelerating in the defense procurement area. As my statement indicates, I don't believe it ever will and I don't believe it ever should reach the same levels of coverage as has become common in the commercial airplane business, in our business.

Each business will have its own parameters, of course. I feel that there are some very significant and probably unbreachable differences between the commercial world and its environment and the relationships in that world and the defense world in that these primarily center around the differences in the mission of the commercial world and the defense world.

I think if the Defense Department had the mission of operating airlines, they would buy everything under warranty just like the airlines do, but their mission requires them to be responsive to needs that are much different than the airlines, need that are often essentially unpredictable.

We cooperate as suppliers in trying to fulfill those needs. We in connection with the competitive source selection of major contracts or source selection to perform major contracts are now seeing warranty requirements coming out in RFP's to us with a fair degree of regularity.

They are not a whole family of specific detailed warranties you get in the commercial world. They are warranties that are more nearly suited to the ideas that once a system has been designed and developed to defense criteria and has been tested so that it shows that it meets those criteria and will operate to the satisfaction of the Defense Department, which is expressed by their accepting the item and putting it in the field, that you will thereafter continue to build the system in accordance with those designs.

In other words, you will meet the standard that you have already established through the testing and the development process.

### PRODUCTION CHANGES UNDER WARRANTY

Senator **Andrews**. Let me run that by again.

Meet that standard, but it could also meet or exceed?

In your civilian experience when you are producing aircraft, 1 month down the line, 2 or 3 months down the line, when you see a change that can be made in the manufacture of that aircraft to make it more durable, better, and exceed the specifications, you go ahead and put that in, as I understand; is that not true?

Mr. **O'Hara**. That is true. We are free to do that and we will elect to go ahead and make changes. We do not have to get the consent of the airline customer in order to do that.

Senator **Andrews**. But the movement of the Pentagon toward warranties and accelerating that movement would help in that instance.

It would help assure if you were producing a helicopter, if you were producing some other kind of weapon system or a fighter plane, that that improvement that seems obvious to the manufacturer would be put on that much faster under a warranty-type system that they are moving toward than under a system they have had for some time.

Is that not essentially true?

Mr. **O'Hara**. Yes. I would reply essentially affirmative.

Senator **Andrews**. Do warranties encourage production of U.S.-made components?

Mr. **O'Hara**. I do not see any correlation.

Mr. **Copeland**. Senator, the decision to make or buy locally or domestically or foreign is made entirely outside the spectrum of the warranty in the main.

Mr. **O'Hara**. I would like to take a few points from my statement to illustrate the position I have just been advancing that there is an accelerating use of warranties.

Senator **Andrews**. We hope there is. That is why we are trying to, shall we say, support those in the Pentagon who are moving in that right direction. We want to enhance that progress.

Mr. **O'Hara**. We find that when Government requirements can be met by a commercially developed product or a close derivative of that product, that it is usual for the Government to request that we offer our standard commercial warranty coverage.

At the same time they do something that the airlines do not do. They ask us to put a separate value or price tag on the removal of that warranty coverage so that they can then make a trade-off decision as to whether to accept our standard commercial warranty or take a discount in its place, a price reduction.

### AWACS

The EO-3, which is more popularly known as the AWACS system, the Airborne Warning and Control System, was competitively procured in 1970, following extended competition between Boeing and McDonnell-Douglas.

Each of us was using as a basis for that system our current major commercial product, the DC-8 for McDonnell-Douglas and 707 for Boeing. Boeing was finally selected the winner in that competition and we were requested to offer a price reduction.

We never had that experience at that time. We didn't know how to do it. We went back and did some calculations, and so did the Air Force, based on the same basic information we shared with them.

Eventually we agreed on a $60,000 per airplane price reduction for the EO-3 aircraft. That is still in effect. Those aircraft are procured under annual appropriations, so we keep getting new contracts for them.

The question keeps arising. The factors that were taken into account, and I happen to be familiar with in discussions as to whether or not it would be appropriate for the Air Force to have a warranty on that airplane, had to do with some of the basic policies that the Air Force follows as to whether or not they would be bound by the conditions that go with the warranty, the condition to follow our commercial manuals regarding the use of the airplane, to operate the airplane only within the limits of the standard commercial operating manual, for example, and use only Boeing equipment and send parts only back to us for repair or else get our prior approval of where the parts were going to be repaired and at what price.

Those were very serious obstacles for the Air Force at that time and I think the decision they made was probably a sound one because if they had accepted our commercial warranty, it is very doubtful if they would have been able to have enough claims, especially with as mature a system as the 707 was at that time, a very low level of parts failures, that it would have worked out.

So, in my judgment, they made a wise choice.

Incidentally, in that procurement there remained in the contract two warranties.

One is the standard inspection clause warranty that is mandatory in defense regulation for every fixed-price procurement of supplies and warranty from later defects, gross mistakes or fraud and it has no time limit.

That has been enforced by the courts as long as 13 years after delivery of the product. So it is a very effective warranty and is suitable.

### CORRECTION OF DEFECIENCIES CLAUSE

The other warranty was correction of deficiencies clause. It covered 30 percent of that total AWACS job which represented the specific differences, the changes that were being made in the system in order to accommodate it to the military use.

That was the kind of warranty I have just described before. It was the kind that said that once this system has been developed, that it will be made in strict accordance with the contract requirements and, of course, it also covered material and workmanship deficiency.

Senator **ANDREWS**. Going back to that for just a moment, Mr. O'Hara, if the military had gone along the way you suggest your commercial customers go along and replaced anything that broke down with Boeing parts and flew that Boeing plane according to the specs that you recommend it be flown to, wouldn't that have enhanced the durability and life of that particular aircraft?

Mr. **O'HARA**. You are talking to a biased witness.

Senator **ANDREWS**. There has to be a reason that you bring that kind of spec into play.

Mr. O'HARA. I think the trouble is that the Air Force's policies are determined not by the behavior, not by the results in any one case or any one system, but rather by their need to comply overall with a number of imperatives.

One of the things that Congress requires of the Defense Department is maximum competitive procurement and the other thing that is required is that they develop and utilize an in-house organic support and maintenance capability.

Those requirements are somehow on a correlation course with the types of fixed relationships that exist between manufacturers and the airlines. It is a different environment.

Senator ANDREWS. They made a $60,000 savings. That is about a one-half percent saving.

Mr. O'HARA. It was less than 1 percent.

Senator ANDREWS. So, they made a less than 1 percent saving to do away with the warranties.

You are pointing out that warranties are not all that expensive. If the warranty on that bird was less than 1 percent of the cost of the bird, that warranty was not grossly expensive.

Mr. O'HARA. That airplane was in service with the airlines for 15 years before it went into the military service. The level of warranty claims was very low. It would not have been expensive.

That is not an isolated case. We have had similar experiences. The Air Force uses for the Advanced Airborne Command Post essentially the 747 commercial airframe. That is the E-4 system.

The Air Force also has purchased navigation trainers which are military designated T-43's and they are an adaptation of the commercial 737 airframe.

In both of those programs similar trade-offs were made. I don't happen to have the dollar figures with me. I tried to get them last night. I could not reach the people who had been in the negotiations.

Similar considerations caused the Air Force to take discounts in both those cases rather than the commercial warranty.

Now, in some other situations we recently competed in the CX competition that resulted in the selection of the McDonnell-Douglas C-17 to be the military airlifter of the future.

All three of those competitors, McDonnell, Lockheed, and Boeing in the final proposals offered warranties that are very, very similar to the commercial warranties that exist for commercial airplanes.

Naturally it was factored into the price, but it was a very competitive procurement and the Air Force in that case made the decision that, yes, they wanted the warranty. So, it was a reversal of the decision on the E-4.

I think the Air Force made a good deal in both cases.

Senator ANDREWS. They had competition and happened to come down with your competitor which was finally selected under that competition, but all three major manufacturers did, in fact, offer warranties?

Mr. O'HARA. That is right.

Senator ANDREWS. General Allen, who was the Commanding Officer of the Military Airlift Command, testified before this subcommittee a year or so ago and said he much preferred the bird that they finally settled on, but instead they threw out all this competition, warranty and everything else, and went back to the C-5 which is what we are now buying.

So, here we get into this Never, Never Land. They come into the present and they look at warranties and they feel them and touch them and say, you know, they are great, but instead of buying one of the three birds that happened to win out in the competition, they go back and buy the C-5.

That is one of the things that concerns us, too. As you know, we have had a good deal of debate in the Senate on that particular plane.

Mr. O'HARA. I think it would be better if I did not comment on the C-5.

Senator ANDREWS. I thought probably you would not want to comment on that. Since you brought up the point, I wanted to mention it.

### KC-135 REENGINING

Mr. O'HARA. I would like to emphasize another kind of thing that is happening. We recently received a contract award for the reengining of the KC-135 Air Force tanker aircraft.

The KC-135 was originally procured back in the 1960's and the early 1970's from Boeing. This contract is not only for reengining, but for some extensive modifications to modernize the airplanes to make them as much as possible the equivalent of new airplanes at greatly reduced cost as against developing a new tanker.

This contract contains unique warranty provisions that cover reliability, maintainability, and mission effectiveness. It is naturally called the R. M. and ME guarantee. It is a mixture of warranty and performance guarantee. That makes it somewhat unusual.

Most of the time here I have been talking about warranties with the airlines. We are not talking about performance and guarantees. I want to come back to that distinction in a minute.

Under the KC-135 warranty the contract targets have been established for the reliability and availability of the overall system and of the major maintenance of the new and modified equipment items.

This is going to be verified during a 3,500-hour flight test program involving the first nine aircraft produced in the program and failures to meet the contract guarantee levels will require corrective redesign, retest, and reequipment by Boeing.

This guarantee is a separately fixed-price element inside that contract and a unique feature of that warranty is that Boeing can earn an incentive profit by exceeding the contract guarantees or by not having to spend as much on corrections and repair and reequipment as we had estimated in setting the price for that warranty.

So, we have two chances to win, we also have chances to lose. it is a good deal for both sides. It was very keenly negotiated.

As I pointed out later in the paper, that kind of thing is an exercise in probability theory because we are talking about something that is brand new, has never been done, and we are setting targets in advance of operational experience, which is the reverse of the way that we go about it in the commercial business.

## AIR-LAUNCHED CRUISE MISSILE

We also have a unique situation in a system which is a pure weapon for combat, the air-launched cruise missile.

Now, the only way you can really determine if the missile is going to be what the Air Force needs is if it works when you hit the button. So, this is an availability warranty. It is tested by annual test firings, and again that is separately priced by us.

If the test firings show deficiencies, a certain number of those firings are not totally successful, and that can be overcome by redesign or reequipment, we are obligated to go ahead and do that, but we can make money on this. We can make a profit on this if we can beat the guarantee availability level as actuarily determined from the test firings.

It is separately priced, so we have the same kind of incentive situation in that warranty that I have described earlier.

What I am trying to paint here is a picture of an evolving and increasingly sophisticated practice that is taking place between defense agencies and contractors in trying to pick and choose the best of our commercial experience and adapt it to the special circumstances of defense needs.

I feel comfortable with that. I have been in the business 30 years in Boeing in both the military and commercial side. Most of the time has been in the military side. Frankly, I find in dealing with military buyers that you get as much sophistication, if not more than we often find in the commercial side.

So, I feel that there is a growing professionalism and in my mind that is a great source of reliance and assurance to the taxpayer and I hope to the Congress.

Senator **Andrews**. I appreciate the way you use that term, growing professionalism when they move toward warranties. I think in a sense that says it all. You are going to do it, you move toward more professional policies when you move toward warranties.

Would it be fair to say that the use of rigorous warranties in the field of commercial aviation, commercial airlines, results in decreased downtime for major repairs, may actually reduce overall operating cost for aircraft of the overall fleet?

Does the fact that you have evolved a rigid warranty and a great quality control system on the assemblyline mean our airlines can keep, in essense, 95, 96, 97 percent of their airplanes ready to go at any given time?

Mr. **Copeland**. Whether warranties do that or not, that condition exists. Warranties would reduce maintenance cost as opposed to not having warranties because there would be certain parts and labor reimbursement provided by use to the airline as regards warranty.

Regarding your statement on downtime, I think the company's effort in overall support of the operators who are our customers, would work that problem separately and outside of the warranty itself, but it would contribute to lower maintenance cost as opposed to not having the warranty.

## PENTAGON USE OF RIGID WARRANTIES

Senator **Andrews**. If you have lower maintenance cost, you have better readiness. As a follow-on to that, do you envision we could see the same favorable results occurring in the Pentagon if they used more rigorous warranties on military parts and equipment?

Mr. **Copeland**. I don't think I would be able to answer that question as such. It would depend on the original price paid for the product with the warranty and without it. I do not know that I could judge that at this time.

Mr. **O'Hara**. My response to that is that the warranty in itself couldn't be expected to bring about the same kind of results that we have in the commercial world.

What brings about those results is the real assurance that the product will perform and the creation of the whole support structure for the product that makes it perform that way.

We provide intensive, close support for airplanes when we first put them in the field. We investigate every delay and we pour efforts into making sure that the things that can be corrected are going to be corrected because it is intensively competitive and because it enhances our future sales.

Senator **Andrews**. That airline when it buys that multimillion dollar bird knows it has to be ready to fly. It can't be sitting off in some hanger.

I wonder if the Air Force gets anywhere close to that same level of readiness. I wonder if 98 percent of the fighter aircraft we have are ready to go. Certainly they should be.

If they are, we have to have that many fewer if you have that high a percentage. If you have that lower percentage ready to go, then we have to buy more birds.

Commercially the airlines could not afford that, so they rely on warranties and good maintenance practices so that they can essentially have their entire fleet ready to go.

I appreciate so much, Mr. O'Hara, you and your colleague coming. You have added a great deal to the knowledge of the subcommittee and to the record.

[The prepared statement of Mr. O'Hara follows:]

# PREPARED STATEMENT OF JOHN A. O'HARA
DIRECTOR OF CONTRACT POLICY
THE BOEING COMPANY

I appreciate the opportunity afforded by the Committee to come here today to offer information and views with respect to the Committee's interest in the application of warranties on purchases of military systems and equipment. I am Director of Contract Policy for The Boeing Company and am located in the Corporate Headquarters in Seattle, Washington. With me today is Leon Copeland, who is Director of Warranties for the Boeing Commercial Airplane Company, located in Renton, Washington.

In our preparation for this appearance, we have endeavored to review the experience of The Boeing Company in providing and administering warranty coverage under our commercial contracts with hundreds of airline customers throughout the world over a period of more than 25 years, covering the modern jet transport aircraft era. We have also reviewed our warranty experience in defense contracts for a variety of defense weapons systems and equipment.

It is our intent in this presentation to provide information on the specifics of warranty coverage for the newest of the Boeing jets, the 757 and 767, and the business and technical environments which have evolved over this period of time to produce the extensive array of product assurance commitments which are made available today to the world's airlines at competitive prices. We will also describe warranty coverages in our defense products and conclude by offering some observations on the nature and the evolution of commercial warranty practices and on the applicability of this experience to the procurement of defense systems and equipment.

Before proceeding further, it is well to distinguish between warranties and performance guarantees. These are separate and distinct concepts.

Performance guarantees relate to the performance characteristics of the aircraft. They are defined in aircraft detailed specifications. They cover such things as take-off and landing field length, speed, range, weight, fuel consumption and other flight characteristics. Performance guarantees are fulfilled by certificates based on testing performed during the development stage, prior to commencement of deliveries. Performance guarantees do not extend beyond delivery because sophisticated and very expensive airplane instrumentation and controlled test conditions and procedures are required for performance verification. Also, manufacturers usually do not guarantee performance of complex technical equipment once the equipment is under control of the purchaser.

Warranties, on the other hand, are contractual assurances that each delivered product is free from defects. These assurances become effective at the time of delivery of each aircraft, continue in effect for specified periods, provide remedies for correcting defects, ground rules for administration and limits on liability.

## BOEING 757 AND 767 PRODUCT ASSURANCE COVERAGE

Boeing offers extensive warranty coverages in every purchase agreement for a 757 or 767 aircraft. These exceed in scope and in length of time any previous warranty coverages offered by Boeing. A list and brief description of these coverages will follow. A pro-forma document which contains the specific terms and conditions and description these warranty coverages is a standard offer provided by Boeing to each prospective airline customer and becomes a contractual document in each purchase agreement.

The 757/767 product assurance coverages are:

- BOEING WARRANTY
- WARRANTY REPAIRS AND MODIFICATIONS BY BUYER
- BOEING SERVICE LIFE POLICY
- BOEING INDEMNITY AGAINST PATENT INFRINGEMENT
- SUPPLIER WARRANTIES AND PATENT INDEMNITIES
- ENGINE MANUFACTURER'S WARRANTY AND PRODUCT SUPPORT PLAN
- BOEING INTERFACE COMMITMENT
- SUPPLIER COMPONENT RELIABILITY (MTBUR/MTBF) PROGRAMS
- COMPONENT RELIABILITY (MTBUR/MTBF) PROGRAM FOR SPECIFIED COMPONENTS MANUFACTURED TO BOEING'S DETAILED DESIGN

A brief description of each of these coverages is as follows:

BOEING WARRANTY

- Boeing warrants that all Boeing-designed systems, accessories, equipment and parts shall be free from defects in design, material, workmanship and detail specification conformance, at the time of delivery.
- Notice periods:
  - Design, material and workmanship:

    Primary structure - 36 months from aircraft delivery.
    All other parts - 24 months or first inspection, whichever is later, not to exceed 36 months.
  - Detail Specification - 12 months
- Remedies:
  - Boeing will repair, correct or replace any item found to be defective during notice period.
  - Boeing pays removal and reinstallation labor and round trip freight for parts returned to Boeing.

WARRANTY REPAIRS AND MODIFICATIONS BY BUYER

- Boeing will reimburse customer for material and labor cost of warranty correction accomplished by the customer.
- Labor hour rate (e.g., $24 per hour for 1983) is agreed upon mutually from time to time.

BOEING SERVICE LIFE POLICY

- Boeing provides reduced price for materials required to correct defects or breakage in primary structural components and other specified components.
- Term is 12 years from delivery of each aircraft or spare part.
- Boeing's share is pro-rata based on 100% at time of aircraft delivery, decreasing on straight-line basis to zero at the end of 12 years.

BOEING INDEMNITY AGAINST PATENT INFRINGEMENT

- Covers all items installed in the aircraft that are manufactured to Boeing's detailed design.
- Protection -- 100% for U.S. patents and 50% for foreign patents.

## SUPPLIER WARRANTIES AND PATENT INDEMNITIES

- Covers equipment manufactured to supplier's detailed design.
- Boeing uses diligent efforts to obtain the following warranties enforceable directly by the customer against the supplier:
  - 36-month basic warranty.
  - Agreement for repair by customer.
  - Repair turn-around time commitment.
  - Other conditions similar to Boeing basic coverage.
- Boeing will assist customer in dealing with the supplier.
- If supplier defaults, Boeing will assume the responsibility.

## ENGINE MANUFACTURER'S WARRANTY AND PRODUCT SUPPORT PLAN

- Boeing obtains warranty and product support plan from engine manufacturer of the customer's choice, for the benefit of the customer.

## BOEING INTERFACE COMMITMENT

- Boeing promptly investigates any problem where the airline customer cannot readily identify the responsible manufacturer.
- Boeing will determine cause, responsible party and corrective action.

## SUPPLIER COMPONENT RELIABILITY (MTBUR/MTBF) PROGRAMS

- Boeing provides contractual commitments, enforceable by airline customer, for about 200 top maintenance significant items designed and manufactured by suppliers other than Boeing.
- Term is 5 years after first entry of product into service.
- If supplier defaults, Boeing will assume responsibility.
- Numerous remedies and coverages (including no-charge loan of spare parts) based on Mean-Time-Between-Failure (MTBF) and Mean-Time-Between-Unscheduled-Removal (MTBUR) contractual targets.

## COMPONENT RELIABILITY (MTBUR/MTBF) PROGRAM FOR SPECIFIED COMPONENTS MANUFACTURED TO BOEING'S DETAILED DESIGN

- Same concept as Supplier Component Reliability coverage.
- Covers specified maintenance significant components designed by Boeing.

## NATURE AND EVOLUTION OF COMMERCIAL AIRPLANE WARRANTIES

In the commercial airplane industry, warranties are coextensive with design and manufacturing responsibility. This means that warranty responsibility flows to the manufacturer who controls the design. This is one of the fundamentals of commercial warranty practice. It represents a natural distribution of cost, liability and profit (or loss) to the most appropriate sources.

There are literally hundreds of individual products which make up a commercial airliner, and each product is under the design control of a primarily responsible manufacturer. The airlines often purchase proprietary components directly both as original equipment and as spares. This supports the continued and direct involvement of those suppliers in product improvement, customer satisfaction and increased sales. In turn, it stimulates a broader base of investment in productivity and incentivizes growth and development of a competitive base of suppliers.

There are three major product segments or groupings which comprise the total warranty coverage for a commercial airliner. These are: (1) The Boeing-designed airframe and components; (2) the engines; and (3) the supplier-designed components. Boeing, as the overall aircraft manufacturer and supplier, warrants the Boeing design and structure and obtains for the benefit of the airline purchaser similar warranty coverages for the engines and the component parts which are developed, designed and produced by the engine and component manufacturers. These latter two classes of warranties run directly between the engine and component manufacturers and the airlines. The coverages of these warranties are varied, but they all have in common the requirements for correction, repair or replacement of defective products, or reimbursement, to the airline for making the repairs or corrections under arrangements worked out between the airline and the manufacturer.

The warranty of design is limited to the state-of-the-art at the time of the design and development of each model. Later discoveries and advancements in technology, materials or designs are improvements and are outside the scope of the original equipment design.

An important characteristic of the aircraft industry warranties is that they are exclusive. That is to say that they define the obligations and liabilities of the manufacturer and the rights, remedies and obligations of the airline customer.

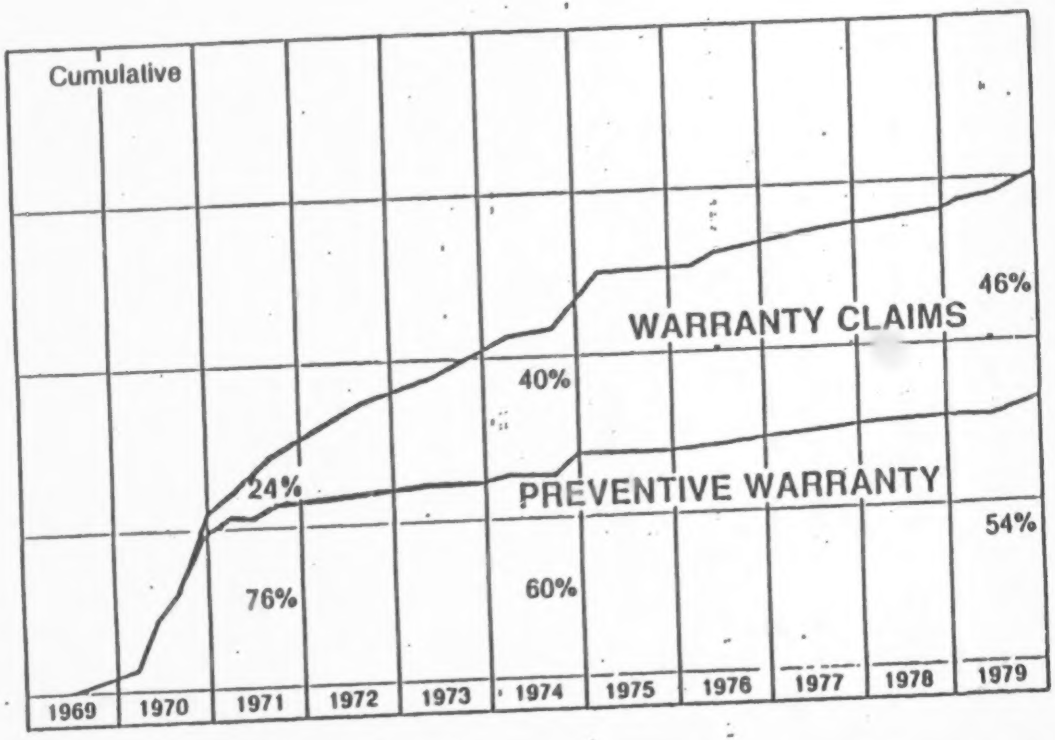
This means that the airline customer in exchange for the manufacturer's warranty undertaking agrees to limit his claims against the manufacturer exclusively to *those warranties expressly* set forth in the purchase contract. It is standard practice for the airline customer to accept the obligation to provide reasonable proof that any defect which is the subject of a warranty claim is not the result of normal wear and tear or of any failure on his part to properly maintain and operate the affected aircraft system, accessory, equipment or part in accordance with the prescribed manuals and technical orders.

Finally, rounding out the description of the commercial warranty environment, there is an industry practice which has grown and developed throughout the years. This is the practice of preventive warranty coverage. While not unique to the commercial aircraft industry, we believe it is more prevalent here than in many other product areas. Preventive warranty is a non-contractual business policy. Its objective is to head-off or curtail design defects which could be costly both to the manufacturer in terms of warranty claims and to the airline in terms of increased operating maintenance cost. It has been Boeing's experience that over the lifetime of each of our new aircraft models our warranty costs are almost evenly divided between preventive warranty action and warranty claims. This typical experience is shown in graphic form in the first of two charts which are shown on the next succeeding pages. The first of these charts is entitled, "Preventive Warranty and Warranty Claims Costs." It depicts the incidence of preventive warranty and warranty claim costs over the ten-year period following the introduction of a new model into airline service.

The second chart is a graphic summary of the 25-plus years of Boeing commercial airplane warranty coverages. It is entitled: "A History of Boeing Pro-Forma Warranties and Related Product Assurance Contractual Commitments." This shows the evolution of warranty coverages for the period 1955 through 1982. As the graph indicates, the present extensive warranty coverages of the 757 and 767 airliners have kept pace with the steady and continuous growth in the reliability of the designs, materials, workmanship, processes, and components which go to make up a jet airliner today.

Boeing, the engine manufacturers and the proprietary component suppliers maintain close contact with each new airplane model as it begins airline service and collect extensive information on maintenance and operational experience of the aircraft and its many subsystems. The airlines cooperate fully. The purpose of this surveillance is to learn about and anticipate problems and to make improvements which will help the new model to build a satisfactory service and performance record. In addition, this provides a reliable data base which provides a sound foundation for increased contractual warranty commitments in subsequent products. This is one of the results of the commercial environment, and its freedom, in which the manufacturers and airline customers are motivated by mutual benefit to pursue continuous product improvement. The resulting improvement in warranty coverages is a product of that environment.

# PREVENTIVE WARRANTY & WARRANTY CLAIMS COSTS



HISTORY OF BOEING PRO FORMA WARRANTIES AND RELATED
PRODUCT ASSURANCE CONTRACTUAL COMMITMENTS

SUBJECT

WARRANTY PERIODS

1. D - 6 MO. OR 1,000 HRS. (BLOCK)
M/W - 12 MO. OR 2,500 HRS. (PER A/P)
2. D - 12 MO. OR 2,500 HRS (BLOCK)
M/W - 24 MO. OR 5,000 HRS (PER A/P)
3. D - 18 MO. NO HR LIMIT (PER A/P)
M/W - 24 MO., 5,000 HR OR 1ST INSP. (NOT TO EXCEED 36 MO./8,000 HRS)
4. D - 18 MO., NO HR. LIMIT
M/W - 24 MO. OR 1ST INSP. UP TO 36 MO.
5. D/M/W PRIMARY STRUCTURE - 36 MO.- 757/767 ONLY
D/M/W OTHER - 24 MO. OR 1ST INSPEC. UP TO 36. MO. 757/767 ONLY

LABOR REIMBURSEMENT

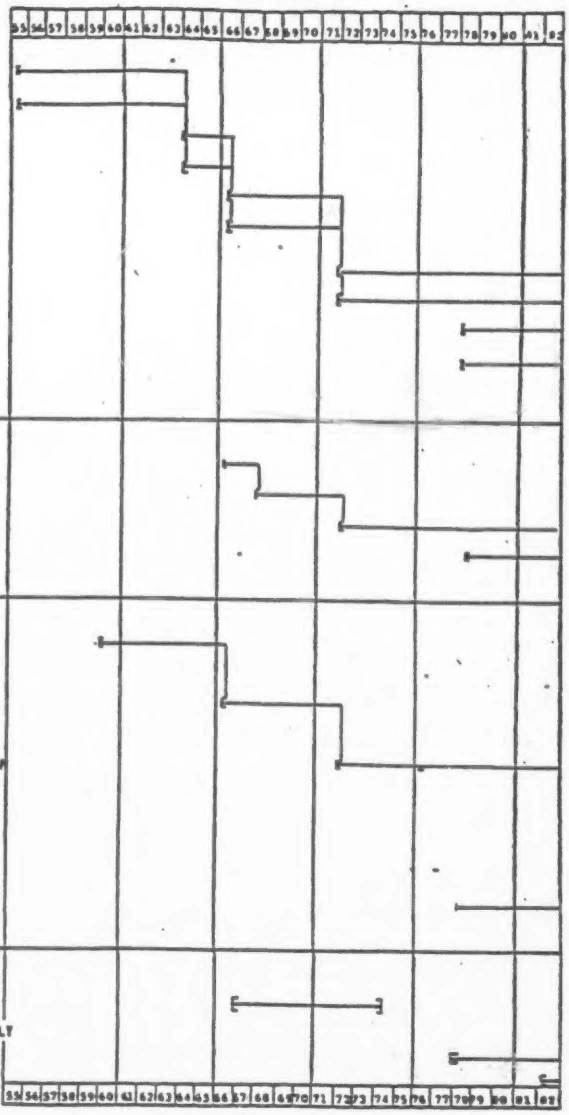
1. M/W ONLY @ AIRLINE DIRECT RATE
2. M/W ONLY @ AIRLINE DIRECT RATE + 50%
3. D/M/W @ AIRLINE DIRECT RATE + 50%
4. SAME AS 3. EXCEPT INCLUDE REMOVAL/ REINSTALL M/HRS - 757/767 ONLY

SERVICE LIFE POLICY (PRIMARY STRUCTURE)

1. AIRFRAME ONLY, FLEET-WIDE ONLY
EXCLUDED INTERGRANULAR CORROSION
10 YEARS OR 30,000 HRS
2. SAME AS 1 EXCEPT ADD LANDING GEAR
10 YEAR OR 30,000 LDG - 727/737/747SR
10 YEAR OR 15,000 LDG - 707/747 LR
3. AIRFRAME & LDG GEAR PLUS INNER STRUCT OF CONTROL SURFACES, ISOLATED CASE PLUS FLEET-WIDE
NO EXCLUSION FOR CORROSION
NO FLIGHT HOUR LIMITS
10 YEARS - 727/737/747SR
10 YEARS OR 15,000 LDG 707/747LR
4. SAME AS 3. EXCEPT
12 YEARS - NO HR OR LDG LIMITS- 757/767 ONLY

COMPONENT RELIABILITY

1. PILOT PROGRAM MTBF ONLY — 747 ONLY
2. SUBSTANTIALLY REVISED PROGRAM-757/767 ONLY
SUPPLIER-DESIGNED ITEMS
BOEING-DESIGNED ITEMS



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D = DESIGN
M/W = MATERIAL & WORKMANSHIP

## DEFENSE CONTRACT WARRANTIES

When Government requirements can be met by a commercially-developed product or a close derivative of such a product, it is usual for the Government to request, and the manufacturer to offer, standard commercial warranty coverages. Boeing's Government contracting experience includes a number of instances where this has occurred.

The E-3 or Airborne Warning and Control System (AWACS) utilizes the Boeing commercial 707 airframe as the air vehicle. This system was procured in 1970 by the Air Force following an extended period of competition between Boeing and McDonnell Douglas Corporation, whose competing system was based on the commercial DC-8. Both Boeing and McDonnell Douglas offered to provide the warranty coverages then applicable to the commercial 707 and DC-8 aircraft. Following source selection in this competition, the final contract negotiations involved a trade-off. Boeing was requested to propose a price reduction in lieu of the commercial warranty. It was the Contracting Officer's eventual decision that the Government's best interests were served by taking the discount. This did not mean that the Government had no warranties available in that procurement. There were two contract warranties that remained applicable. These were the Inspection Clause warranty -- freedom from latent defects, fraud or gross mistakes, tantamount to fraud. This is mandatory under the Defense Acquisition Regulations (DAR) for all procurement of supplies under fixed-price contracts (see DAR 7-103.5); and there was a Correction of Deficiences Clause warranty (see DAR 7-105.7(c)). This warranty is used extensively in the procurement of major defense systems where the Government maintains design control and specifies the design and performance requirements. It provides for the contractor to correct failures of the supplies or technical data to conform to contract requirements without change in the contract price.

Boeing has had a similar experience in the procurement of the E-4 (Advanced Airborne Command Post), which utilizes the commercial 747 airframe, and the T-43 (Navigation Trainer), which utilizes the 737 airframe.

Boeing has also been involved in several major competitive defense procurements in recent years where extensive warranty proposals were request. In each case we proposed coverages that were very similar to commercial airplane warranties.

One of these was the C-X competition for a new Air Force airlift transport airplane. The eventual selection in that competition was the McDonnell Douglas C-17. The resulting contract contains warranties which are similar in many respects and more extensive in some respects than the comparable commercial airplane warranties. All three competitors, Boeing, Lockheed and McDonnell Douglas offered similar warranties.

Another case was the effort by Boeing to obtain an award for the 747 freighter as a military airlifter in place of the proposed procurement of C-5B aircraft. Boeing's unsolicited proposal in this case would have provided in resulting contract, if awarded, warranty coverages fully equal to the 747 commercial warranties.

In another recent case, Boeing was successful and did receive a contract award for the re-engining of KC-135 Air Force tanker aircraft. The KC-135R contract contains unique warranty provisions that cover Reliability, Maintainability and Mission Effectiveness. Naturally, it is called the R,M and ME guarantee. This is a mixture of warranty and performance guarantee for the new and modified equipment and the resulting overall KC-135R aircraft. Under this guarantee, the contract targets for these equipment items and for the overall modified KC-135 system will be verified during a 3500-hour flight test program involving the first 9 aircraft produced in this program. Failures to meet the contract guarantee levels will require corrective redesign, retest and re-equipment by Boeing. This R, M and ME guarantee is a separately fixed-priced element within the contract. A unique feature of this warranty is that Boeing can earn incentive profit by exceeding the contract guarantees. This same contract also contains a special warranty requiring correction of any defects in materials and workmanship and in the integration and installation of the modifications into the KC-135R aircraft, which become apparent within 6 months after delivery of each modified aircraft.

In the Air Force's Air Launched Cruise Missile (ALCM) Program, where Boeing was selected as the prime contractor after a lengthy competitive fly-off, there is a unique availability guarantee which is based upon the results of an annual test firing program. If the test firings do not meet the contract availability level because of design or other deficiencies which are Boeing's responsibility under the contract, Boeing then has a redesign and re-equipment responsibility up to predetermined cost levels. This guarantee also has incentive features because, if Boeing can do better than the guaranteed availability performance, it can earn extra profit.

With rare exceptions, Boeing's defense contracts for delivery of supplies are fixed-price contracts. They contain the mandatory Inspection Warranty Clause, which was mentioned above. In particular, Boeing's defense contracts for production of major systems (and this constitutes the great preponderance of Boeing's defense business) are likewise fixed-price or fixed-price-incentive contracts. These contain the Correction of Deficiencies Warranty Clause described above.

In comparing our Government warranty experience with our commercial warranty experience, the Government warranty coverages, while present in almost all contracts and certainly in all major production contracts, are not as extensive as the commercial warranties. The Service Life warranties, engine manufacturer and component manufacturers' warranties, and MTBF and MTBUR component reliability coverages which are universal in commercial airline purchase agreements are present in some degree in some defense contracts, but not in every case.

The differences can be explained largely by the different nature of the products supplied under our defense contracts, the greatly different uses of these products as compared with commercial aircraft, and the absense of a suitable data base of operational and maintenance experience on which to base warranty predictions.

Finally, and perhaps most importantly, our Defense Department customers do not grant us the same degree of freedom of action, nor do they place the same reliance upon us, as our airline commercial customers do.

## THE APPLICABILITY OF COMMERCIAL WARRANTY PRACTICES TO PROCUREMENT OF DEFENSE SUPPLIES

In examining the question of the applicability of commercial warranties to defense procurement, the differences in the business and technical requirements and relationships of Government contracting, as compared with commercial airline practices, appear to us to be very significant. A number of differences would have to be eliminated or greatly reduced in order to achieve a workable and effective result.

Boeing and each of the other major airline producers offer to a large number of individual airlines, large and small throughout the world, a relatively small number of basic aircraft models which have been highly developed and extensively tested and proven before delivery to the airlines. The design, development, testing and quality control of these products, while subject to Federal Aviation Administration (FAA) surveillance, is totally controlled and performed by the responsible manufacturer. Further, as noted previously, each responsible manufacturer warrants his own products, directly to the airlines. This raises several key questions which should be considering the application of commercial warranty practices to defense procurement. First, the buying agency should be willing and prepared to deal with multiple supplier warranties on a single complex end item such as a weapon, or combat or transportation system. Second, the buying agency would have to determine in advance, and be willing to accept, a limited involvement in control over the contractor's design.

For most defense products there is very little comparability to the market environment which produces the reliances which the airlines place on commercial airplane manufacturers.

Another consideration in examining the application of warranties to defense procurement is the effect on pricing. In a commercial market, the price is established by the market place. Warranty cost is a relatively small element in establishing an overall commercial price. The airplane, engine and component manufacturers invest large amounts of money in development and testing, in the tooling and inventory build-up before making the first delivery, and in product improvement cost throughout the life of the aircraft. The manufacturers attempt to recover this investment and realize a profitable return on it by obtaining a projected share over a period of many years in a world-wide market which has been expanding for most of the modern era. The precise year of cost incurrence and the precise amount of cost incurred in each year does not determine whether the manufacturer will be able to eventually recover his cost through eventual sales.

In defense procurement the picture is totally different. The cost of every element at every step in the process, from the beginning of development through the end of a successful production run is significant, and must be given full consideration. By law and regulation there must be total cost visibility and accountability. Each element which contributes to the cost of performing a defense contract must be identified, and must be estimated, proposed, costed and paid in a consistent manner, established in advance. Also, costs must be allocated to contracts in the year when they are incurred. Annual appropriations require that costs be related to specific Fiscal Year contracts. The rules which govern defense contracting, accordingly, require an ability to predict costs, not just in amount, but also in the time of occurence. Warranty costs are frequently not so predictable. A warranty is a form of contingent liability. Defense contract regulations prohibit the inclusion of contingencies in contract cost estimates unless they are identified together with the rationale for their inclusion. For a new defense product, not previously used or operated, this can become an exercise in probability theory. At best, it presents special and unusual pricing and accountability problems, which can become more severe, and more subject to after-the-fact criticism, where the product does not enjoy a suitable product performance data base to permit reasonable and sensible predictability.

There can be siginficant differences in the environment in which commercial and military airplanes are operated. Operating instructions and manuals and rules governing airline flight operations are based on civil aircraft and passenger convenience, comfort and safety. Airline maintenance and repair must be carried out by licensed personnel and are also subject to civil aircraft regulations. Commercial planes are operated only over established route structures at speeds and altitudes controlled by the air traffic system, and, again, based on passenger comfort and safety factors. Military operations and maintenance are not so constrained. The differences in exposure of equipment to extremes of design capability can provide wide variations in product performance and maintenance cost in military operations, as compared to the more stable and predictable airline operations.

The warranty terms of our commercial contracts are generally well known to customers and competitors alike. They are generally standardized in advance of sale and fully set forth in pro-forma documents. They are administered under standardized business and technical arrangements which have evolved over a long period of time and are well understood and accepted. One result is that in connection with the sale of billions of dollars of commercial airplanes with extensive warranty coverages, Boeing has scarcely any litigation involving airline warranty claims. The experience of our competitors is comparable.

In meeting our contractual commitments, including warranty commitments, we and the other commercial airplane producers enjoy virtually complete freedom of action. So long as the aircraft performs to its guaranteed requirements and continues to meet the safety requirements of the Federal air regulations and retains its airworthiness certification, Boeing is free to make design changes in order to correct defects, meet maintenance and realiability targets and improve overall product performance, as well as our production cost and our airline customer's operating cost.

Virtually none of these circumstances apply to defense procurement. Defense agencies determine their own requirements not only for products, but for the performances and other characteristics and contents of those products.

In the case of airplanes, the Defense agencies usually specify the engines and other items of equipment and components which must be used. The Defense agency maintains technical laboratories and utilizes Federally-funded Research and Development Centers to provide technical direction and system engineering for defense products. Manufacturers are not free to deviate from these requirements or from the military specifications which are mandatory under regulations and a result of long-established practices.

Overriding all of these specific characteristics of defense contracting is the annual Authorization and Appropriations process, which produces a special set of uncertainties and, characteristically, a considerable amount of instability. This process alone constrains the freedom of action and the incentive to invest in warranty avoidance and product improvement actions, which are so fundamental to the creation, acceptance and discharge of product responsibility in the commercial airplane business.

## CONCLUSION

The evolution among the Defense agencies of policies and practices of self-reliance, self-determination and self-insurance with respect to the determination of product requirements, the design of defense products and the logistical support in the field of those products, is adapted to the Government contracting environment. As such, this environment is understandably deeply resistant to changes which would contemplate any significant shifting of authorities, responsibilities and reliances from the Defense agencies to private contractors. This is not said in condemnation or criticism of that resistance, but rather as an acknowledgement of the deeply-established and long-standing institutional and political relationships within Government and between the Government agencies and the private firms which contract with them.

Accordingly, it is our view that a change in the defense procurement act through legislation requiring specific warranty coverages in each procurement of supplies would not, in itself, produce fundamental changes in or change the underlying policies of Government agencies in determining requirements, and specifying performance and design characteristics of defense products. For major systems and their key components, such as engines and avionics equipment, the Defense Department would, in our view, continue to control design, development and testing of new products intended for defense and combat use.

## Project on Military Procurement

## STATEMENT OF DINA RASOR, PROJECT DIRECTOR, PROJECT ON MILITARY PROCUREMENT

### INTRODUCTION OF WITNESSES

Senator **Andrews**. Our next witness is Dina Rasor, project director of project on military procurement.

Welcome to the subcommittee. Let me assure you, as I have the other witnesses, that your statement will be included as if given in full. You can proceed in any way you want to summarize, capsulate, whatever else.

Ms. **Rasor**. That will be fine. I believe in short but concise statements.

I would like to introduce Tom Matteson whom I have brought as an expert witness. Obviously I am not an expert witness. He is retired vice president of maintenance of United Airlines and was involved in warranties throughout his entire career.

### WARRANTIES IN DOD

I would like to start out by saying today I have heard an awful lot of what we can't do as far as the warranties by the Department of Defense and by Boeing and maybe some of the other people.

I am here to talk about what we can do. I see that every time that someone comes up with an initiative in the Department of Defense, that is competition, warranty or independent testing of weapons, you get a great deal about why they can't do it and how they can't do it and what they can't do for the taxpayer.

Senator **Andrews**. You seem to think there are a lot of "can't artists" around.

Ms. **Rasor**. That is right. I understand they may resent being told how to manage the system. However, their track record is not that good. I think that is one of the reasons you are concerned.

I am not interested in coming up and going over all the bad things that have happened in the last 2 or 3 years or 20 years. I am interested in a solution for the taxpayer. I am not here as a professional "naysayer."

We are a nonprofit organization which tries to investigate defense spending to see that we get the best bang for the buck. If the Pentagon would start producing reliable weapons at reliable cost, I would be happy to do something else.

In summarizing, something came to my mind during this testimony, Lloyds of London will insure about anything you want, actresses have their legs insured. It is a matter of how much the cost is going to be.

When the military comes up and talks about the fact that we can't have a warranty, it really all depends on how much you are willing to pay for it, when we see how much it is going to cost us in spare parts and recalls and rebuilding and modifications to the weapons we are buying right now, those warranties really are a good investment.

If they don't have any confidence in their product, they they won't offer warranties. I think companies need to offer warranties to the Department of Defense.

I think it is something that the Department of Defense will have to accept. They will have to be held to the same principles as the commercial market is. They have not had to do that for the last 20 years, but I think the Senate and the House, to our advantage and investment of the taxpayers, must do that.

I know it is a different situation in the free market because in the free market it is a matter of profit. Warranties are to guarantee that you don't lose profitably buying something that doesn't work.

In the Pentagon it is effectiveness. It is coming down to money, but it is effectiveness. When the soldier is asked to put his life on the line, he must firmly believe the money has purchased a weapon which meets all criteria for successful operation under the most adverse conditions likely to be encountered.

It is true once the shooting starts it will be awful hard to find out if a weapon fails to meet a warranty. It think it would be very hard to have a warranty on a racing car driver's transmission because you know when he goes out there he will push that to the limit.

### M-1 TANK TRANSMISSION

The same with the soldier. I know on the M-1 tank one of the problems is the transmission. They were moving it forward very fast and then throwing it in reverse and that caused the transmission to fail.

One of the ways they fixed the transmission was to order them not to do that, not to throw it in reverse while you are still moving forward. It will be very hard for the soldiers to remember that.

What I would like to say in general and then I will turn it over to Mr. Matteson, besides being ready and effective, there is another problem with not having equipment that is working, and that is training. Troops can't train on the weapons because they are constantly being fixed. You know they have only so much life on them and you can't go out and change, the spare parts budget is so much.

We can't maintain this weapon for you to drive this tank so many miles a day. That affects this problem. I can see going to the point that in peacetime the soldiers and commander will feel more confident taking that equipment out and doing what the Israelis, do, train vigorously every day.

We have seen the results in Lebanon with their fighters. In fact, they spend a good deal of time in the air practicing every day. That is why they are very good, the best in the world. The reason is that they have the money to do it and they fix their planes so that they are willing to make the sacrifice.

I hope the warranties will help improve our training by giving enough confidence that we can use the equipment instead of just having it stored and unusable.

We use two examples in our testimony.

### HUEY HELICOPTER

One is the Huey aircraft which was the workhorse of the Army in Vietnam. It was once a purely military design. Now it is becoming a part of the commercial civilian air transport sector.

I do know on the commercial side that the performance warranty covers all parts and performance for 90 days while the airframe, engine and batteries carry separate warranties. That is a militarily designed helicopter that is now being sold in the commercial market and they have a warranty on it.

I think the committee ought to look and see what warranties we have on the Huey. In like manner the Cherry Blazer of which we are buying 50,000 by the U.S. Army, I am not sure what the warranty is on that.

The U.S Army has not answered our questions. I do want to say that we called up a local Chevrolet dealer and they told us there is a buyer's warranty of 12,000 miles on the vehicle and 1,200 miles on the engine and drive train and you can actually buy a better warranty than that.

Here are two things where on the commercial side there are warranties. I think the committee ought to check out and see what is on the other side. I, unfortunately, was not able to find out.

I would like to turn this over to Mr. Matteson. He has some idea of how to begin the process to put in warranties to make them work and to see what they can do to try to fix this problem, what we can do to move forward.

Rather than talking about what we can't do, talk about all the reasons that we can't do it. I think we ought to explore the innovative reasons how we can do it and solve the problems.

[The prepared statement of Ms. Rasor follows:]

# Project on Military Procurement

### PREPARED STATEMENT OF DINA RASOR
### PROJECT DIRECTOR

Mr. Chairman and members of the Committee, thank you for the opportunity to appear before the Subcommittee on Defense.

The Project on Military Procurement is part of the Fund for Constitutional Government, a non-profit, tax-deductible organization. We examine defense spending to see if the American taxpayer is gaining increased security for his defense dollar. The Project is taking a serious look at HOW defense money is being spent, WHAT we are getting for that money, and WHO is benefiting from large defense expenditures.

The Project's short-term goal is simple: to bring spending abuses and ill-conceived weapon systems to the attention of the public and Congress. Our long-term goal is far more complicated, but essential: to reform the military acquisition system to ensure that this country gets the most effective, reliable weapons at the lowest cost to the taxpayer.

## WARRANTIES

In virtually every commercial enterprise, the performance of equipment on a long-term basis is a matter of prime importance. Once acquired and placed into service in a manufacturing environment, a machine must produce at a determined rate over an extended period of time in order to produce a profit for the firm. In like manner, a working machine produced by a commercial firm and sold to a consumer must also return a performance consistent with the promise of the design and the sale of the product in a competitive field offering a member of different machines designed to meet the same need. By inference, of course, the military unit equipped with tanks, trucks, guns and planes, as well as all of the myriad supplies to keep those items in regular service, must be assured of the practical function of those items under the harsh life and death circumstances of war. Though as an editorial in the Washington Times[1] has served to highlight, it is too late when the shooting begins to demand performance on the basis of a pro-offered or negotiated warranty - it is none the less an issue of great importance in the years of design, development, production and fielding of weapons before their commitment to combat. When asked to put his life on the line, the citizen soldier must firmly believe that his money purchased a weapon which meets all of the criteria for successful operation under the most adverse conditions likely to be encountered.

## HOW WARRANTIES ARE USED IN THE COMMERCIAL SECTOR

Realizing that profit in the commerical sector revolves in part on the reliable performance of equipment over an extended period of time - its useful life - management constantly strives to improve their performance or production by monitoring the Mean Hours Between Failure (or in many cases now, the Mean Hours Between Unscheduled Replacement) of various Machines and their contituent components. Should such a machine fail in service due to one or more component failures, time and production - representing profit - are lost. Time to repair the machine involves rendering part of the labor force inactive while also, in many cases, demanding the attention of special maintenance personnel to attend to the machine. In cases where machinery constantly malfunctions, production not only plummets, but the ranks of the maintenance personnel - an otherwise non-productive element of the manufacturing process - swells in response to increasing service calls.

Costs associated with the maintenance functions may also be found in the spare parts required to maintain such equipment. In all cases where spare parts are required to maintain machinery, both on-hand spares, as well as "in pipeline" spares, must be considered. Examples of such components might include the more sophisticated radar and electronic guidance sets used in aircraft or transmissions used in vehicles. As the reliability of such a given component decreases, the number of such spare - and attendant costs in maintaining increased stocks - rises, until such time as the cost of spares outweighs the cost of seeking and installing an alternative component or machine to meet the need.

## HOW WARRANTIES ARE USED IN BUSINESS

As part of the competitive process, warranties are offered or negotiated as part of the sales effort on each of the firm's products. As Webster's dictionary defines the use of the word, a warranty is "a usually written guarantee of the integrity of a product and of the maker's responsibility for the repairs or replacement of defective parts."[2] As a sales tool, the warranty most often reflects the confidence of the manufacturer in the quality of the product and its reliability under the conditions for which the item is purchased. As a sales tool, the warranty most often reflects the confidence of the manufacturer in the quality of the product and its reliability under the conditions for which the item is purchased. By offering a warranty with longer coverage periods for failures to, and replacements of, their components, firms gain an edge in negotiating the purchases of their products in the face of a competitor's similar product.

## THE VALUE OF WARRANTIES

Since warranties are driven by free-market competition, the net result of a warranty on any product or component is to increase the "quality" of that product. Although quality is often a subjective opinion, such as in the overall appreciation of the external design or look of a car or a house, it can, and most often does have a quantitative value in terms of the finite engineering and production effort in the manufacturing process. The failure of a car to start, a telephone to be accidentally dropped and still function or a window to freely glide up and down in the frame, are all values which can be readily measured by mechanical and scientific means and without any emotional impact. The number of failures, the type of failures, the cost of failed components, the cost to obtain replacements and the cost to install the replacement, as well as the reduction in revenue (or consumer use) due to loss of use, may be readily computed in dollar terms. Thus, as a measure of potential sales and income, the warranty represents independent initiatives to improve the manufacturing process to avoid flawed products and to therefore reduce the cost of those products or components wherever possible. In short, competition demands product quality.

A further measure of the value of warranties may be evidenced in the very small number of cases which reach the courts. concerning failure of a firm to meet the promised performance of their goods and services. The desire of a firm to maintain a creditable standing in their field and to avoid adverse public reaction to failed products results most often in responsible steps to effect immediate corrective action,and may also result in internal product improvements to avoid bearing the costs of such failures in the future.

CAN WARRANTIES BE USED IN THE MILITARY?

As we noted, once the shooting starts, no time remains to demand improvements in, or replacements of, defective materials. But the soldier does require that his equipment perform on a regular basis and remain functional for a probable period of time, such that he can judge, or safely assume, the proper design and function of that equipment when his life is on the line.

Such equipment may not carry, in its current procurement by the military, any implied or explicit warranties. Such is the nature of the government designed equipment in new development fields as in the procurement of a new design of equipment. But this need not be the case. As we have seen in the past, the ubiquitous Bell UH-1 "Huey" helicopter of Vietnam, once a purely military driven design, is now increasingly becoming a part of the commercial civilian air transport sector[3]. Warranties in its current civilian version consist of an overall performance warranty covering all parts and performance for a period of 90 days, while the airframe, engine and batteries, among other components, carry separate warranties covered by their respective manufacturers.[4] In like manner, a one-time civilian vehicle, the GMC 4 x 4 cross-country light truck, the "Blazer," is now being procured to the tune of 54,831 vehicles by the U.S. Army under the military title, Commercial Utility Cargo Vehicle (CUCV) as a partial replacement for the M-151 "Jeep."[5] This vehicle originally came with a buyer's warranty of 12,000 miles on the vehicle and 1,200 miles on the engine and drive train.[6] As competition in the vehicle market increased in the face of foreign vehicle exports, additional warranty coverage could be obtained at purchase by the buyer for a pre-determined nation-wide set dollar amount over the base price of the vehicle.[7] If is of course expected that similar warranties may be obtained by the military in their purchase of such civilian vehicles turned military.

In short, the products and services rendered to the military and commercial sectors are often highly compatible and warranties available in the civilian sector should apply equally and in full force and similar cost in the military sector.

## WHAT A MILITARY WARRANTY SHOULD ACCOMPLISH

Each component designed and developed for military use, or adapted for military use from the civilian sector, must undergo a rigorous evaluation by the responsible Engineering Design group. As each item is evaluated, a set of Engineering Design Specifications (and the supporting, general specifications of the

Contracting Officer's Military Specifications - or MILSPECS) are established which identify and stipulate minimum performance standards. Although in many cases a contractor will intentionally or even unintentionally, surpass those guidelines, such specifications are deliberately established to permit that component to function in its assigned role and under all adverse conditions in which it is expected to be employed. In combat, this may include the firing of a rocket-propelled anti-tank grenade after it has been submerged, or carried in the rain for 6 hours, or may represent the safe performance of a nut on a helicopter main rotor assembly over a period of flight hours.

The warranty then, as it relates to the quality of the product, its performance according to the minimum established standards, is the key to assuring contractor compliance with the set standards for each product or component, original or spare, as procured by and for the military forces.

## THE MILITARY WARRANTY - RECOMMENDED FEATURES

In the development of warranties specifically to cover the contractor compliance with the minimum product performance standards, a few cardinal rules may be recommended.

First and foremost, it is strongly recommended that any warranty for contractor supplied military goods or services be kept as simple as possible. Since warranties entail the registration of product, component, or spare parts serial numbers, or lot numbers in the case of bulk purchased spare parts or non-critical components-such as sleeping bags, wooden packing boxes or wing nuts-it is essential to reduce to a minimum the formal reporting by DOD field personnel of the flaws, performance failures and replacements in the course of peacetime or military operations. At most, it is expected that a simple report on the failed item by the direct user, as well as a substantiating report and listing of serial numbers involved by maintenance personnel, may be forwarded together after such maintenance to the supporting logistics center for appropriate action by, at most, one more responsible individual. Certainly the effort involved is to confirm by resolute action the performance of a contractor and not to create a bureaucratic paper blizzard.

Second, tie the performance of the contractor to the Engineering Design Specifications, or MILSPECS. In other words, tie contractor performance to quality of the product. As long as the product meets all of the minimum standards established, competition in the free market offering to supply the goods meeting those minimum design and performance specifications, will most probably result in improved quality over and above the minimum standards for the same reasons referred to above in competitive commercial markets.

Third, in determining the warranties applicable to various products and components, stress performance warranty of the product in the negotiation between user and prime contractor. By example, indicate a number of hours of operation of equipment without repair (including as necessary, normal maintenance of the "add oil and check the tire pressure" variety) and meeting specified performance goals. Such an all-encompassing user/prime contractor warranty in many cases, is not as exhaustive as those employed in the commercial sector (as evidenced by user/sub-contractor warranty negotiators) but effectively steers clear of the numerous pitfalls - and paperwork - of such endeavors for which the military has neither the time nor the manpower.

Fourth, in the expectation that the prime contractor will establish with its sub-contractors in turn, the minimum standards of component reliability and applicable warranties, require that all spare parts and sub-components purchased in addition to the major product (vehicle, plane, gun, etc.) carry a reliability warranty per the prime contractor/sub-contractor purchase agreement.

Fifth, establish and vigorously pursue standards for "expected life" of each product per the warranty coverage and establish a "rebate" program at the outset for all items,such that the failed component may be charged back to the manufacturer or supplier for the value paid for and not received in the failed component or service. Such a "rebate" policy is the surest direct method to check on and constantly maintain and improve product quality through the efforts of the contractor.

## COST OF WARRANTIES FOR MILITARY PROGRAMS

As is the case in the commercial sector, it is very difficult, if not impossible, to establish a "direct cost" of a given warranty for a specific product or service. Specifically, in the case of instituting a full warranty program for the military, it would be very difficult to establish a "cost added" for the warranty coverage on new components. However, as in the commercial sector, the challenge of competition for contracts linked with the observance of and rebate penalty for failure to meet the design specifications should result in warranty cost no greater than that in the commercial sector. In the initial stages, a reference check of contractor product and component performance should serve to identify those contractors with whom the government may expect to find a substantial price rise attached to subsequent component purchases due to high failure rate and provide guidance both in terms of seeking higher quality and achieving lower costs.

Extended warranties, as currently offered on commerical vehicles, may also prove of value to the military and may be guided by the purchase of the "Blazer" cross country vehicle we have mentioned above, among others.

## CONCLUSION

As we noted in our discussion of the impact on commercial costs. It is certainly no different in the military sector. As we have reported previously on weapons testing, a weapon in the hands of the soldier,which doesn't work at the critical moment in combat, must not be permitted to enter the system.[8] After design and development is completed and the weapon passes its testing for operational deployment, it is the responsibility of the military procurement community to constantly maintain the established minimum standards and where possible, by competitive negotiation and bidding, improve the quality of all weapons and equipment in the hands of our soldiers. When it comes to the moment of decision, we cannot afford to have the combat soldier frantically attempting repairs to a failed or flawed weapon. Nor can be added countless otherwise productive people to ever burgeoning maintenance commands to keep such weapons functioning in the face of countless and increasing components failures in our ever more complex equipment. A weapon which is broken down or failed in combat is certainly no better than a production machine in a manufacturing plant which remains idle awaiting service. But worse, lives depend on weapons in war, 24 hours of every day. If we can get a warranty on a steak knife set, an automobile and a jumbo jet, we can - and must - obtain warranties and performance on computers,tanks and fighter bombers. Anything less cheats the citizen soldier at a cost to high to bear.

The Project on Military Procurement strongly approves and supports the military warranty initiatives of Senator Andrews.

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## COMMERCIAL AIRLINE COMMUNITY

### STATEMENT OF MR. TOM MATTESON, CONSULTANT, MAINTENANCE AND SYSTEMS FAILURES, AIRLINE COMMUNITY

### WARRANTIES IN COMMERCIAL AIRLINE INDUSTRY

Mr. **MATTESON**. Mr. Chairman and members of the committee, thank you very much for the opportunity to appear today before the Senate Appropriations Subcommittee on Defense.

My comments today are based on my experience in negotiating and administering warranties in the air transport community. I have 32 years' experience in the air transport community, primarily in the areas of maintenance engineering. Those activities have been focused in most cases on increasing the effectiveness of the maintenance process.

I don't want to travel under a false flag. There are a number of people in United Airlines who might be called vice presidents of maintenance. I was vice president of that part of maintenance associated with increasing the effectiveness of the product.

There are, I believe, support commitments of a wide range of clients very active in the airline community. I am going to talk about this primarily because of the tendency to think of warranties as a monolith.

They are not a monolith in any sense. In a specific context these agreements or arrangements may be called guarantees. They may be called warranties. The essence of them is that failure to meet some predetermined standard requires some action by the seller for the benefit of the buyer.

All warranties are not the same. There is a tendency, I believe, in the negative context to establish the most complex position interpretation of the word and say we can't do it.

### TYPES OF WARRANTIES

The simplest kind of these warranties is essentially the same as those provided by home appliance manufacturers. They provide free repair and/or replacement if failure occurs within a prescribed time. It is what I would call a first-life warranty.

You are not warrantied for the first operating experience of the hardware and you have some confidence that if the hardware does not last as long as that interval, you have support from the manufacturer.

In the airline community for repairable assemblies this kind of warranty originally was only for 90 days 25 years ago. That same kind of warranty is offered in the airline community now for periods as long as 36 months in the repairable component area in the same sort of context as the appliance in the home operating environment.

Senator **ANDREWS**. In other words, it just did not happen overnight? They began this warranty experiment and it began to grow to the point where the warranties now are longer and more effective?

Mr. **MATTESON**. Yes, sir.

Senator **Andrews**. The beginning we are seeing in the Pentagon now is in fact just that, the same beginning that we observed in the commercial side 15 or 20 years earlier.

Mr. **Matteson**. It is true in general that irrespective of the benefits provided for each successive product provided in the air transport community the period of warranty was significantly increased and benefits have been improved as a result of competitive forces in the marketplace.

Senator **Andrews**. So, warranties and competition exist side by side?

Mr. **Matteson**. Absolutely. Every warranty with which I was involved in successive procurements of major equipment in the airline industry as a more expensive, deeper, broader commitment by the manufacturer.

Now I think that the current state of warranties in the air transport industry today would be absolutely unworkable if they were applied in the Air Force, in the Navy, in the military community because they involve, as has already been described, a rather complex interaction between experience people who are knowledgeable about the way these things operate and can be administered and control them at a level which is perhaps impossible in the widely dispersed administration activities in which the military has to operate.

Nevertheless, I believe a very simple warranty focused on the time to first failure of important military system components is workable. I believe it would be potentially beneficial in both the short- and long-term for a wide range of equipment.

Given considerable experience at this level of complexity, I then believe that additional muscle in the warranty process along the lines that have developed in the airline community is possible, but it would be a terrible mistake to try to achieve all of that at one time.

I think it is also unlikely that all of the characteristics of the airline community warranty could ever be used effectively in the military environment, and some of those ideas were touched upon by previous witnesses.

If we move it in the direction of more complexity, future warranties should be based at insuring achievement of in-service reliability goals. That is the next step.

First, we say first life. Next we say ongoing performance level which is related to the expected reliability of the design. That progress will be constrained by the quality of the in-service data collection.

If they cannot acquire the information necessary to administer the warranty, then obviously the warranty can't be applied.

### WARRANTY NEGOTIATIONS

Now, in commercial practice it has been useful to conduct these warranty negotiations in a very special way. One of the traditional ways has been for the prime manufacturer in his subcontractual negotiations to establish a baseline set of rules by which the subcontractor must design the warranty for his particular piece of equipment.

Then the prime contractor leaves the door open for the buyer, for the ultimate user, to negotiate something better, if he can, on a competitive basis with the subcontractor. I think that involves a very nifty way for the individual buyer to obtain benefits that are associated with his relationship with the subcontractor, but I don't think that it is a workable idea in the military environment.

In fact, if the warranties were obtained from the primes and the primes were in effect directed to obtain competitive warranty proposals from their subs, that you have a more likely opportunity for success.

Now, I think it is important to keep in mind in a complex system that a long period of failure-free operation at first use is incompatible with their complexity. Therefore, it is correct for complex assemblies to establish a first-life warranty which is necessarily a very large part of the expected mean time between failures.

The first life is almost always going to be shorter for a complex assembly.

I think if you will look at the two charts that are on the back of my prepared testimony, you will note that these talk about reliability characteristics.

The first displays the likely alternatives. We have found that these now represent the generic set of alternatives, major reliability relationships with which we have to deal in our community.

The second one shows the relative prevalence of those various kinds of relationships. You will note from examination of the second that the dominance of infant mortality is very important.

In complex assemblies you will find a very, very large percent of the hardware as originally built has a high level of infant mortality. For that reason again the idea of establishing the first failure-free life would be at a lower level than the expected MTBF, but would give tremendous benefits because the problems we are talking about today are not failure after long life, but failure after a short period of time.

### SPECIALIZED WARRANTY CONCEPT

Senator ANDREWS. In other words, you are envisioning the warranty concept which you point out would have to be specialized and rather unique in the military? You could not just capture chapter, letter and verse from the commercial warranties and put it in, but the concept itself, the modifications that fit the military you feel could well be the engine that would drive the military toward more reliability in its product design in the first place, knowing there was a requirement for a warranty out there?

Mr. MATTESON. Absolutely. Let us consider an analogy for the moment.

If this wrist watch can be considered a complex assembly, it has many failure modes and it is quite susceptible as a result to infant mortality.

Consider this paper clip as being probably the most simplest thing you can perceive as a device. It probably has only one failure mode and it is probably not subject at all to infant mortality.

We have a wide spectrum to which we have to apply the warranty concept. We have to understand that before we try to do it. The failure mode for the paper clip obviously is a fatigue failure. If I bend it back and forth I take 20 clips and bend them until they fail, I have a close relationship. It is impossible with this complex thing to be anywhere as exact associated with this warranty process.

In summary, I would like to say that I agree with what has been said with respect to the cost of warranties in that there is no such thing as a free lunch.

The important thing is that the customer feels he has gotten his value for what he is paid. There is in effect a functional benefit associated with the warranty process being enforced by my colleagues from USAir.

However, I believe the important thing is to keep the warranties simple and perhaps to limit not only their complexity, but also their application to insure that we focus on a small number of items that can be effectively managed initiatively so that we can overcome that tremendous sort of reaction that says, well, this requires a tremendous amount of administrative overhead and we can't handle it because of the additional overhead requirements involved.

However, it has also been demonstrated, as I had planned to say in my summary remarks, that in the competitive environment the cost of warranties is generally relatively insignificant because as demonstrated in the discussion between the suppliers, when in fact there is a competitive environment the additional cost identified for warranties is really very small.

[The prepared statement of Mr. Matteson follows:]

# PREPARED STATEMENT OF TOM MATTESON

## CONSULTANT—MAINTENANCE AND SYSTEMS FAILURES

## AIRLINE COMMUNITY

Mr. Chairman and members of the Committee, thank you for the opportunity to appear before the Senate Appropriations Subcommittee on Defense. My comments today are based on the negotiations and administration of warranties in the air transport community.

### WARRANTIES IN THE AIR TRANSPORT COMMUNITY

There are support commitments of several kinds that exist in the airline community. These in a specific context may be called either guarantees or warranties. The essence of all of these is that failure to meet some predetermined standard requires some action by the seller for the benefit of the buyer.

The simplest kind of these warranties is essentially the same as provided by home appliance manufacturers--free repair and/or replacement if failure occurs within a prescribed time. In the airline community for repairable assemblies this time was initially as low as ninety days. In recent procurement it has been as high as 36 months. It is true, in general, that irrespective of the benefits provided, for each successive product the period of warranty has been significantly increased, and the benefits have been improved as the result of competitive forces in the marketplace.

In my belief, provisions characteristic of todays practice in the air transport community are far more complex than could be administratively supported by the military services. Nevertheless I believe that a very simple warranty focused on the time to first failure of important military systems components is workable and potentially beneficial both in the short and long terms. Given considerable experience at this level of complexity, I believe that additional muscle in the warranty process along the lines of those developed by the airline community is practicable. It is, however, unlikely that all the characteristics in the airline community could ever be used effectively in the military environment.

Future warranties should be directed at ensuring achievement of in-service reliability goals. But please note that ability to apply them in this mode will be constrained by the quality of the services' in-service reliability data.

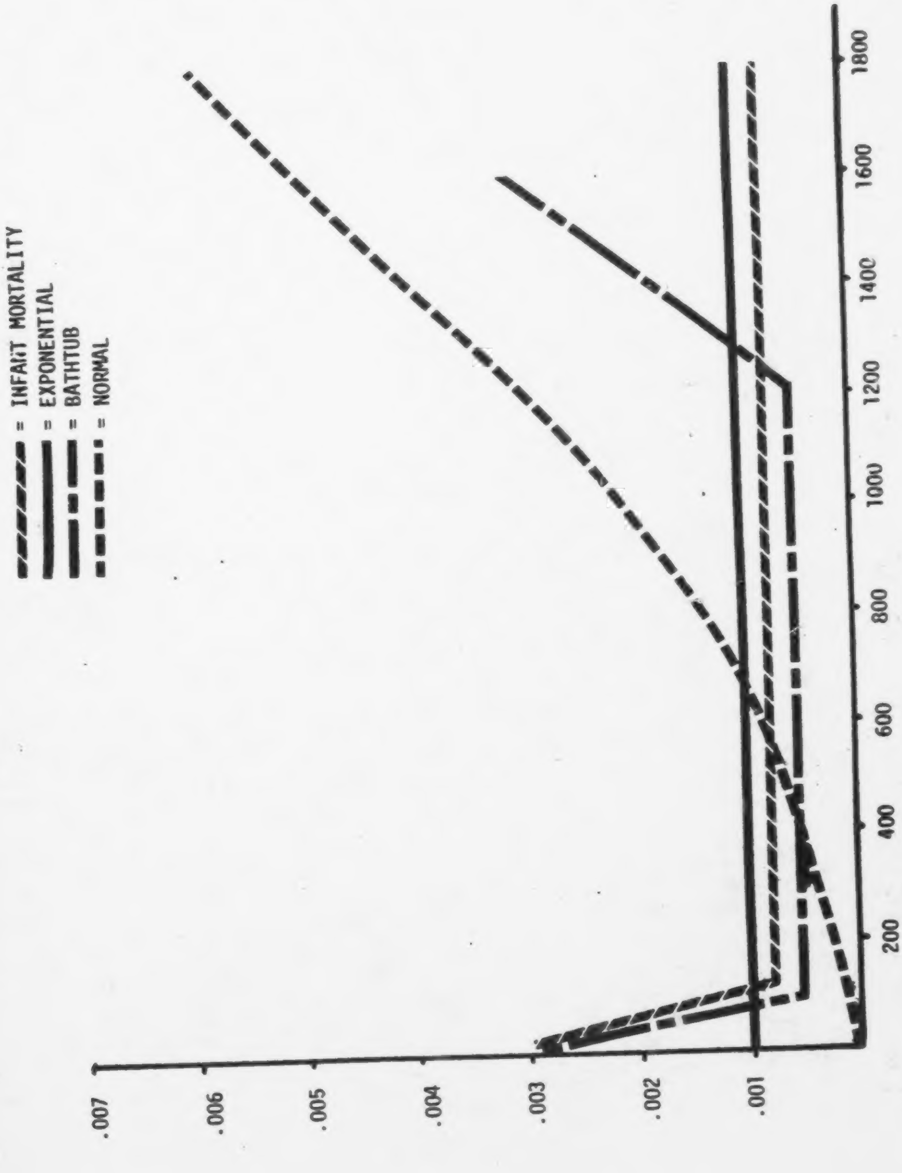
Although commercial practice has been to conduct user/sub-contractor warranty negotiations (subject to oversight by the prime contractor), limiting negotiations on warranties to user/prime contractor would appear to be a more practicable approach for the military services. (It would be expected that the prime contractor's warranty to the user would be the result of his competitive negotiations during sub-contractor selection.)

It is important to keep in mind that for complex systems the idea of obtaining a long period of "failure free" operations at first use is incompatible with their nature. Therefore it is incorrect to expect that, for complex assemblies, the "first life" of each unit will necessarily represent its long-term Mean Time Between Failures. Therefore, a first use warranty may be considerably shorter than the Mean Time Between Failures and still be an effective device.

Let's look at two graphic examples that describe the real world in respect to age-reliabilities characteristics. The first displays the likely alternatives. The second displays their relative frequency based upon a large number of careful analyses. Note the dominance of "infant mortality"--the failure of a component early in its predicted useful life--which is a characteristic of complex assemblies.

For simple items whose failure modes are few and are less threatened by infant mortality a longer first life warranty is appropriate.

Consider the analogy that a wristwatch as a complex assembly is threatened by infant mortality and a wide range of failure modes, while a paperclip is not threatened by infant mortality and may have only one dominant failure mode. In the first case a first life warranty that is a small fraction of the mean life would be quite appropriate. In the second case a first life warranty that is a large fraction of the mean life would in like manner be most appropriate.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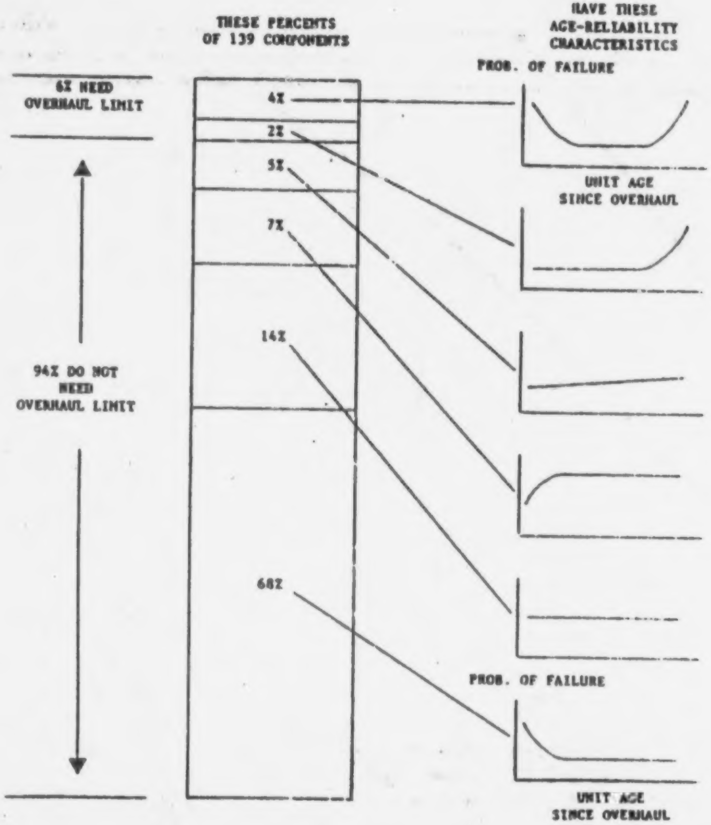
# AGE-RELIABILITY RELATIONSHIPS FROM UNITED AIRLINES STUDY



## WARRANTIES ON PARTS AND EQUIPMENT

Senator **Andrews**. In your career in the civilian airline business, in your opinion, based on your expertise in the maintenance of a commercial airline fleet, how important to the effective operation and maintenance of your airplanes were warranties on parts and equipment? Did they play a very important part?

Mr. **Matteson**. I think that because of the airlines in themselves are economic entities, if they didn't feel that the warranties played an important part, they wouldn't pay for them.

Senator **Andrews**. In essence, what you are saying then is out in the free enterprise part of our economy the board of directors of the airlines felt that warranties were necessary to gain the reliability and cost control that was necessary in running their business?

Mr. **Matteson**. I think that that must be true, otherwise we would not have perceived the extension and broadening of the application of warranties as time has gone on.

If, in fact, initial warranties had been perceived by airlines as being ineffective and not worth the time and effort they represented, we would have gone back to the manufacturer and said we don't want any more of those.

If we had felt the warranty approach was an effective way to achieve our objective, then we asked for more and we got more.

## COST OF EFFECTIVENESS OF WARRANTIES

Senator **Andrews**. You found out when you were in the airline business that warranties were not costly, but they were cost effectie?

Mr. **Matteson**. Yes. However, one of the reasons that they are cost effective is that there have been very, very careful and intensive negotiations between the buyer and the seller to insure that they were of that kind.

Senator **Andrews**. I cited sometime ago the C-5 where some in the Pentagon decided to take a little bit of the strength out of that wing spar. That couldn't have happened really in your procurement in an airline with the people who were providing you the airplane, as I understand it?

Mr. **Matteson**. No, it probably would not have been involved in the warranty question, but it would have been involved in the engineer oversight performed by the airlines during the creation of the design.

Senator **Andrews**. So, what a warranty might give us, if we could put it into more use in the military, is some type of check and balance over the design dependability because you would call into effect not just the design people in the Pentagon, but design people in the company that was producing that particular airplane or weapons sytem or whatever else?

Mr. **Matteson**. That is right. However, some of the more complex warranties deal more directly with that problem than the simple type that I have suggested.

Senator **Andrews**. That is true, but Dina mentioned a minute ago the fact they removed the problem, the Allison transmission in the M1 tank. She was with three of us on this subcommittee when we decided 2 years ago we wanted to see what it looked like.

You can't imagine the consternation of the tank commanders when they saw three Senators and a young lady about to drive their tanks. But the tanks survived and so did we.

The point I am bringing up is at that point in time when these enlisted people out in the field were telling us about the breakdowns in the transmission when they tried to throw it in reverse in a hurry I have the feeling that had Allison been told that this is the way it was going to be used in the field and had the Allison Transmission Co. been aware of that problem, their designers could have fixed the baffles and the valves and whatever else so that particular transmission could in fact survive.

Mr. **MATTESON**. Your point is very well taken. There was a red herring drawn across the table here earlier in terms of the fact that the environment negates the ability to design a warranty.

The designer should understand the environment and if he understands the environment, the environment is not a constraint associated with creating a warranty.

Senator **ANDREWS**. If some motor pool operator knew how my sugar beet trucks operated in a soggy field with an overweight load on the back end of them and under all kinds of weather conditions and the rest, those Allison transmissions, they would realize, can be designed to work and they are.

They are some of the most dependable pieces of machinery we have on the farm. They are slammed from forward to reverse in a hurry with a 30-ton load on them, and they do work.

## WARRANTY HELP OR COST CONTROL

Another point on warranties besides the design dependability and check on design, am I wrong in assuming the warranty would also help with cost control?

Mr. **MATTESON**. The operating cost?

Senator **ANDREWS**. No, the cost of making good later on a system that in effect doesn't work.

Our problems, and I appreciate your saying you don't want to be a "can't artist"—neither do we, we want to find solutions—there are enough people raising objections with what is going on, the problems we read about are the weapon systems we get and all of a sudden we get an item that doesn't work and all of that.

If we combine, along with the design part of it, a warranty, we wouldn't be manufacturing those things if they weren't going to work out in the field, would we?

Mr. **MATTESON**. You are getting a little bit out of my territory.

Senator **ANDREWS**. I am getting out of my territory, too. Frankly, what I am looking for are answers because the more complete we can make these hearings the more we have to refer back to.

Mr. **MATTESON**. Obviously if the designer has knowledge of the existence of a warranty, he is going to be motivated in the proper direction, affected by the various factors that exist.

Senator **ANDREWS**. A warranty is one of the best ways of assuring quality control on the assembly?

Mr. **MATTESON**. That is the other step. Of course, it is that quality control on the assembly line, the first-life warranty, that we will attack directly.

Senator **Andrews**. I appreciate very much your contribution. You have shed a good deal of light on our challenge.

I also appreciate your candor in pointing out that while warranties are extremely effective on the civilian side, they obviously would have to be modified when they move into the defense side. That is one that those of us on the subcommittee share as well.

You have contributed a great deal to our knowledge. We look forward to working with you in the weeks to come.

### SUBCOMMITTEE RECESS

The subcommittee stands in recess subject to the call of the Chair.

[Whereupon, at 12:20 p.m., Wednesday, September 14, the subcommittee was recessed to reconvene at the call of the Chair.]

# MATERIAL SUBMITTED SUBSEQUENT TO HEARING

[CLERK'S NOTE.—Additional material, received subsequent to the hearing, will be inserted in the record at this point.]

## PREPARED STATEMENT OF ELECTRONIC INDUSTRIES ASSOCIATION

The Electronic Industries Association (EIA) has noted recent hearings by the Subcommittee on the subject of warranties on military equipment, and the fact that Senator Mark Andrews has expressed the intention of requiring warranties on all future buys of military equipment. Many of our 400 member companies are engaged in providing quality products to the Defense Department by contract, and it is on their behalf that we offer the following comments.

EIA fully supports the idea that the United States government should buy the products it needs at the lowest possible cost with the highest quality and on-time delivery. However, for reasons expressed in this letter, we do not support the introduction of the warranty provisions currently being considered in the Defense Appropriations legislation.

We recognize that in appropriate circumstances, warranties for defense equipment should be offered to, and accepted by, the Defense Department for such equipment for which a substantial volume of performance field data has been developed. However, consideration must be given to the affect of the warranty cost on the price of the contract, as well as the government's own performance evaluation criteria under which sound business judgment would be utilized to determine the value relationship. There may well be situations in which it would not be cost effective for the government to demand and receive a warranty.

Warranties of standard commercial products are based on years of use by the ultimate user and years of study of product life, repacement or repair costs and accurate service repair records. The cost of the warranty is then projected over a number of years and numerous contracts for many customers. Warranties in defense equipment, however, would apply only to a limited number of products and would therefore by substantially more costly.

The business and technical requirements of the commercial sector vary greatly from those experienced in the defense procurement environment. Commercial manufacturers specify operating instructions in connection with product warranties which restrict their utilization and the environment in which these products are operated. The setting of similar restrictions by manufacturers of military equipment would clearly not be possible. Maintenance and repair of commercial equipment can be more effectively controlled in terms of who may perform the work, where it may be performed (generally at contractor facilities), and what replacement parts may be utilized. However, operation and maintenance of defense systems and equipment are usually very different, and maintenance can not always be performed at contractor facilities under predictable or contractor controlled conditions.

A commercial product manufacturer can exercise complete freedom to make design changes he deems necessary, while the government retains overriding control of design, testing, quality assurance, and acceptance criteria for military products. Even when accepting contractors' warranties on proven products in accordance with the Defense Acquisition Regulations (DAR), the government usually continues to use the same costly test and acceptance procedures on current contracts that were used in the design and development contracts.

Suppliers of defense subsystems and components will not risk the cost of replacing the total end product without including a substantial warranty contingency in their prices. The result could well be a costly pyramiding of warranty costs.

We recognize and support the concerns expressed by members of the Subcommittee that defense equipment be reliable and be procured on the most cost effective terms. We believe, however, that the record developed to date is insufficient to establish that the proposed statutory requirement for warranties on all defense buys must be enacted. We recommend consideration be given to further hearings focusing on how commercial warranties are developed using extensive field tests, long production runs, and numerous customers in a projected market over which to allocate the costs.

The government's primary concern should be the acquisition of quality products to meet its requirements. The use of warranties should be but one tool available to government managers if sound business judgment should so dictate.

Our representatives would be pleased to meet with committee members, or appropriate staff persons to further discuss and clarify our views.

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